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ABBREVIATIONS

Terms and Titles

AAFC Agriculture and Agri-Food Canada

AAQC Ambient Air Quality Criteria

ANSI Area of Natural and Scientific Interest

AOC Areas of Concern

AOU Area of the Undertaking

APF Agriculture Policy Framework

APHU Algoma Public Health Unit

BAO Bait Association of Ontario

BCCA Basic Comprehensive Certificate of Approval

BIAs Business improvement areas

BMPs Best management practices

BRT Bus rapid transit

BSBIA Bloor Street Business Improvement Area

BYBIA Bloor-Yorkville Business Improvement Area

CABC Concerned About Bloor Coalition

CAEAL Canadian Association for Environmental Analytical Laboratories

CCD Colony Collapse Disorder

CCME Canadian Council of Ministers of the Environment

CDW Federal-Provincial-Territorial Committee on Drinking Water

CE Collingwood Ethanol

CEEAC Collingwood East Environmental Action Committee

CELA Canadian Environmental Law Association

CESD Commissioner of the Environment and Sustainable Development

CFS Canadian Forestry Service

CHD Canadian Hydro Developers Inc.

CIELAP Canadian Institute for Environmental Law and Policy

Class EA Class Environmental Assessment

CLC Community Liaison Committee

C of A Certificate of Approval

CO Conservation Officer

CO2 Carbon dioxide

COA Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem

CMC Community Monitoring Committee

Cr Chromium

Cr (III) Trivalent chromium

Cr (VI) Hexavalent chromium

CSA Canadian Standards Association

CTF Canadian Taxpayers Federation

CWSs Canada-wide Standards

DfE Design for the Environment

DFO Department of Fisheries and Oceans (Federal)

EA Environmental Assessment

EC Electrical conductivity

EC Environment Canada

ECO Environmental Commissioner of Ontario

EDU Ministry of Education

EEE Electrical and Electronic Equipment

EFP Environmental Farm Plan(s)

ENG Ministry of Energy

ENGO Environmental Non-Governmental Organization

EPR Environmental Project Report

EPR Extended Producer Responsibility

ERT Environmental Review Tribunal

ESR Environmental Study Report

FMZ Fisheries Management Zone(s)

FRHV Friends of the Red Hill Valley

FTL Full-tree logging

GB Greenbelt

GGH Greater Golden Horseshoe

GHG Greenhouse Gas(es)

GRCA Ganaraksa Region Conservation Authority

GTA Greater Toronto Area

GWP Global warming potential

HOV High occupancy vehicle(s)

IC&I Industrial, commercial & institutional (waste)

IEB Investigations and Enforcement Branch

IFO Industry Funding Organization

IJC International Joint Commission

IPSP Integrated Power System Plan

ISP Industry Stewardship Plan

LOE Lines of Evidence

LSEMS Lake Simcoe Environmental Management Strategy

LSP Land Stewardship Program (Ontario)

LSRCA Lake Simcoe Region Conservation
Authority

MCEA Municipal Class Environmental Assessment

MCS Ministry of Consumer Services

MEA Municipal Engineers Association

MEI Ministry of Energy and Infrastructure

MGS Ministry of Government Services

MHSW Municipal hazardous or special Waste

MMAH Ministry of Municipal Affairs and Housing

MNDM Ministry of Northern Development and Mines

MNR Ministry of Natural Resources **MOE** Ministry of the Environment

MOF Ministry of Finance

MOHLTC Ministry of Health and Long Term Care

MRI Ministry of Research and Innovation MSBCS Ministry of Small Business and Consumer Services

MTO Ministry of Transportation

mwin Municipal Waste Integration Network **NHIC** National Heritage Information Centre

NMP Nutrient Management Plan

NOx Nitrogen Oxides

NSCP National Soil Conservation Program

OECD Organization for Economic Cooperation and Development

OES Ontario Electronic Stewardship

OFA Ontario Federation of Agriculture

OFAH Ontario Federation of Anglers and Hunters

OLL Ontario Living Legacy

OLRB Ontario Labour Relations Board

OMAFRA Ontario Ministry of Agriculture, Food and Rural Affairs

OMB Ontario Municipal Board

OPA Ontario Power Authority

OPG Ontario Power Generation

O. Reg. Ontario Regulation

ORMCP Oak Ridges Moraine Conservation Plan

OSCIA Ontario Soil and Crop Improvement Association

OU Order Unit

OWMA Ontario Waste Management Association

PLUARG Pollution from Land Use Activities Reference Group

PMRA Pest Management Regulatory Agency

PM_{2.5} Air-borne particulate matter smaller than 2.5 microns

PO Provincial Officer

PPCP Pharmaceuticals and Personal Care Products

PPS Provincial Policy Statement

PRPIR Procedures for Responding to Pollution

PSW Provincially significant wetland

PTTW Permit to take water

PWQO Provincial Water Quality Objective(s)

RFEI Request for Expressions of Interest

RFP Request for Proposal

RSC Record of Site Condition

RTP Regional Transportation Plan

SCC Safety Cycling Coalition

SDWS Small drinking water systems

SEV Statement of Environmental Values

SOM Soil organic matter

SPA Special Policy Area(s)

SQEP Soil Quality Evaluation Program

STP Sewage Treatment Plant

SWEEP Soil and Waste Environmental Enhancement Program

TCE Trichloroethylene

TLL Tree-length logging

ToR Terms of Reference

TPAP Transit Project Assessment Process

TPS Transit Priority Statement

TRV Toxicity reference value(s)

TSSA Technical Standards and Safety Authority

USLE Universal Soil Loss Equation

WDO Waste Diversion Ontario

WEEE Waste Electrical and Electronic Equipment

YDSS York Durham Sewer System

Legislation

ARA Aggregate Resources Act

BCA Building Code Act, 1992

CAA Conservation Authorities Act

CEAA Canadian Environmental Assessment Act

CEPA Canadian Environmental Protection
Act

CFSA Crown Forest Sustainability Act

CWA Clean Water Act, 2006

DADA Dead Animal Disposal Act

EAA Environmental Assessment Act

EBR Environmental Bill of Rights

ECLA Energy Conservation Leadership Act, 2006

EPA Environmental Protection Act

ESA Endangered Species Act, 2007

FIPPA Freedom of Information and Protection of Privacy Act

FSQA Food Safety and Quality Act

FWCA Fish and Wildlife Conservation Act, 1997

GEA Green Energy Act, 2009

GEGEA Green Energy and Green Economy Act, 2009

HPPA Health Protection and Promotion Act **HSIA** Health System Improvements Act,
2007

Environmental Commissioner of Ontario

2008/2009 Annual Report Supplement

KHSSPA Kawartha Highlands Signature
Site Parks Act, 2003

LRIA Lakes and Rivers Improvement Act
LSPA Lake Simcoe Protection Act, 2008

MFIPPA Ministry of Freedom of Information and
Protection of Privacy Act

NMA Nutrient Management Act

ORMCA Oak Ridges Moraine Conservation
Act

OWRA Ontario Water Resources Act
PGA Places to Grow Act, 2005
PPA Provincial Parks Act
PPCRA Provincial Parks and Conservation
Reserves Act, 2006
SDWA Safe Drinking Water Act, 2002
TSSA Technical Standards & Safety Act, 2000
WDA Waste Diversion Act, 2002

PREFACE: INTRODUCTION TO THE SUPPLEMENT

Welcome to the Supplement to the Environmental Commissioner of Ontario's 2008/2009 Annual Report. This year's Supplement consists of 12 sections. It addresses the reporting year of April 1, 2008 to March 31, 2009. The following summary provides a short guide to the various sections of the Supplement, and discusses their contents and context within the reporting responsibilities of the Environmental Commissioner of Ontario.

Section 1 - Unposted Proposals and Decisions

Under the *Environmental Bill of Rights, 1993 (EBR)*, prescribed ministries are required to post notices for environmentally significant proposals on the Environmental Registry for public comment. Once a ministry has made a decision on how it will proceed, it must update the proposal notice with a decision notice. When it comes to the attention of the ECO that a ministry subject to the *EBR* has made an environmentally significant proposal or decision without first posting a notice on the Registry, we review that proposal or decision and make inquiries to that ministry to determine whether the public's participation rights have been respected. For this reporting period, 12 unposted proposals and decisions were singled out by the ECO and are described in this section.

Section 2 – Ministries' Use of Information Notices

Significant differences exist between the requirements ministries must meet for regular proposal notices posted on the Environmental Registry under section 15, 16, or 22 of the *EBR* and information notices created under section 6 of the *EBR*. When regular proposal notices are posted on the Registry, a ministry is required to consider public comment and post a decision notice explaining the effect of the comments on the ministry's decision. The ministry is also obligated to consider its Statement of Environmental Values in its decision-making. In terms of public accountability and transparency, this process is far superior to the posting of an information notice. However, in cases where provincial ministries are not required to post a regular proposal notice, they can still provide a public service by voluntarily posting an information notice. These notices keep Ontario's residents informed of important environmental developments.

As presented in this section, 11 ministries posted information notices during the 2008/2009 reporting year. The ECO's review found that while some of these postings constituted acceptable and even commendable uses of information notices, sharing important information with the public, others were unacceptable and should have been posted as regular proposal notices for full public consultation.

Section 3 – Ministries' Use of Exception Notices

Under the *EBR*, there are limited circumstances in which ministries may proceed with an environmentally significant decision and then inform the public through an "exception notice," instead of following the normal process of posting a proposal notice for prior public notification and consultation. Exception notices may be used in cases of emergency, or when another equivalent public participation process takes place instead. Section 3 reviews two exception notices, both posted by the Ministry of the Environment (MOE).

Section 4 – Decision Reviews

Each year the ECO reviews a sampling of the environmentally significant decisions made by ministries prescribed under the *EBR*. During the 2008/2009 reporting year, 2,067 decision notices were posted on the Environmental Registry, most of them for site-specific permits or approvals. Forty-two decisions were for policies, two for Acts and 19 for regulations. Whether the ECO conducts a detailed review on a ministry decision depends on the decision's environmental significance and on the public's interest in the

decision. Section 4 of this report consists of detailed reviews undertaken by the ECO for 11 selected decisions by three ministries.

Sections 5 & 6 – Applications for Review and Investigation

Under the *EBR*, Ontario residents can file "applications for review," asking government ministries to review an existing policy, law, regulation or instrument if they feel the environment is not being protected, or to review the need for a new law, regulation or policy. The public can also make "applications for investigation," asking ministries to investigate alleged contraventions of environmental laws, regulations and instruments. The ECO reviews applications for completeness, and forwards them to the appropriate ministry.

Each reporting year the ECO reviews and reports on the handling and disposition of applications by ministries. In this section we provide a detailed review of applications on which ministries have made a decision during the reporting year. Applications that have been received but not responded to by ministries are also briefly summarized. Section 5 provides a summary and review of applications for review, while section 6 addresses applications for investigation.

Section 7 - Will our Cropland Last Forever?

This special section of the Supplement reviews the status of Ontario's cropland soils, and enquires whether our current management approaches for agricultural soils are sustainable in the long term. Are we adequately monitoring and reporting on soil erosion rates and soil organic content? How effective are our programs to encourage soil conservation practices?

Section 8 – EBR Leave to Appeal Applications

For certain instruments issued by ministries, e.g., certain certificates of approval or permits to take water, Ontario residents have 15 days to seek leave to appeal the decision after it is posted on the Environmental Registry. If leave is granted, the dispute can proceed to a full tribunal hearing or it can result in a settlement that often addresses some or even most of the concerns raised by the applicants. The ECO posts notices on the Registry of these leave to appeal applications, and updates them once the appropriate appeal tribunals have made their decisions. This section provides a summary of the five new leave to appeal applications under the *EBR* that were filed during the 2008/2009 reporting year.

Section 9 - EBR Court Actions

Under section 84 of the *EBR*, residents of Ontario have the right to bring a legal action against someone who is violating or is about to violate an environmental Act, regulation or instrument, and is harming, or about to harm, a public resource. In addition, anyone who suffers, or who may suffer, a direct economic loss or personal injury as a result of a public nuisance that caused harm to the environment may bring a legal action under section 103 of the *EBR*. The ECO is responsible for posting notices of court actions on the Registry for information purposes only. While there were no new court actions brought under the *EBR*, this section provides a summary of the two court actions that were ongoing during the 2008/2009 reporting year.

Section 10 - Employer Reprisal Applications (Section 105 of the EBR)

The EBR protects employees from reprisals by employers if they report unsafe environmental practices of their employers or otherwise use their rights under the EBR. Section 105 of the *EBR* states that employees may file complaints with the Ontario Labour Relations Board (OLRB) about employers who have taken reprisals against them when they seek to have environmental laws enforced. During the 2008/2009 reporting period, one applicant filed an application with the OLRB under section 174 of the *Environmental Protection Act (EPA)* and section 105 of the *EBR* alleging reprisals by his employer.

Section 11 – Status of ECO and Public Requests to Prescribe New or Existing Ministries for Laws, Regulations or Processes under the *EBR*

The ECO constantly tracks legal and policy developments at the prescribed ministries and in the Ontario government as a whole, and encourages ministries to update the *EBR* regulations to include new laws and prescribe new government initiatives that are environmentally significant. Section 9 discusses how the ministries go about prescribing new laws, regulations and ministry processes under the *EBR*, and provides two summary tables outlining the status of ECO and ministry efforts to keep the *EBR* in sync with various recent Acts, regulations and ministry processes.

Section 12 - Undecided Proposals

The ECO is required under section 58(c) of the *EBR* to report annually on all proposals posted on the Environmental Registry within the reporting year that have not had a decision notice posted by March 31 of that year. This report is available by request to the ECO.

SECTION 1

ECO REVIEWS OF UNPOSTED DECISIONS

SECTION 1: ECO REVIEWS OF UNPOSTED DECISIONS

Public participation in environmental decision-making is at the heart of the *Environmental Bill of Rights* (*EBR*). Under sections 15, 16 and 22 of the *EBR*, prescribed ministries are required to post notices of environmentally significant proposals for policies, Acts, regulations and instruments on the Environmental Registry. Proposed Ministries and the Technical Standards and Safety Authority are required to post certain environmentally significant proposals for public comment for a minimum of 30 days before decisions are made on them. The ministry must also consider all comments received through public consultation, post a decision notice on the Registry to notify the public when a proposal is implemented, and explain the effect of public comments on the decision.

When it comes to the attention of the Environmental Commissioner of Ontario (ECO) that a ministry subject to the *EBR* has made an environmentally significant proposal or decision without posting a proposal notice on the Environmental Registry, the ECO reviews that proposal or decision to determine whether the public's participation rights have been respected.

The ECO's review of unposted proposals and decisions includes cases where ministries post information notices on the Environmental Registry when proposal notices under sections 15, 16 or 22 of the *EBR* should have been used.

Such inquiries can lead to one of several outcomes. The ministry may provide the ECO with legitimate reasons for not posting the proposal or decision on the Environmental Registry. For example, the proposal or decision may not in fact be environmentally significant, or it may fall within one of the exceptions allowed by the *EBR*. In other cases, if the ministry has not yet implemented the proposal or decision, it may agree to post a notice on the Registry and allow public input. Finally, in certain cases, the ministry may choose not to rectify the situation, because the decision has already been made, or, unlike the ECO, they do not regard the decision as environmentally significant, or for some other reason. In such cases, the ECO believes that the ministry has not adhered to the requirements of the *EBR* and has deprived the Ontario public of notification and comment rights.

While the ECO monitors decision-making in all prescribed ministries, in 2008/2009, we made inquiries on specific proposals and decisions made by the Ministry of the Environment, the Ministry of Natural Resources, the Ministry of Transportation, the Ministry of Small Business and Consumer Services and Ministry of Government Services. Twelve policies, regulations and instruments, summarized below, were identified by the ECO as unposted proposals or decisions. Each summary provides information on the proposal or decision, explains the ministry's response to the ECO's inquiry, and discusses whether this response was adequate under the *EBR*.

In addition to monitoring ministries' compliance with their Registry posting obligations under the *EBR*, from time to time the ECO contacts ministries to remind them of potential upcoming *EBR* notice requirements, or to ask a ministry to post an information notice to inform the public about an environmentally significant proposal that does not fall under the ministry's *EBR* posting obligations. In February 2009, the ECO asked the Ministry of Municipal Affairs and Housing (MMAH) to post an information notice about that ministry's statutory review of the *City of Toronto Act, 2006*. The ECO also reminded MMAH that it would be required to post a notice on the Environmental Registry about any environmentally significant amendments to the *City of Toronto Act, 2006* that are proposed as a result of the review. Unfortunately, MMAH did not post an information notice, despite the ECO's request.

Also in February 2009, the ECO wrote to the Minister of Economic Development (MED) about a new program developed by that ministry called "Open for Business: Guide to Reduce the Burden" that intended to achieve 25 per cent deregulation within government ministries by capping the number of new regulations made and eliminating some existing regulations. The ECO reminded MED and all prescribed ministries of their obligation to give notice on the Environmental Registry of the repeal of any environmentally significant regulations under this program. ECO staff did not identify any environmentally significant regulations made under prescribed acts that were repealed during the reporting period and that could be linked to the Open for Business program.

Ministry of the Environment

- Proposed Extension of the Ministry of Northern Development and Mine's Declaration Orders
- Classifying Instruments Issued Pursuant to the *Endangered Species Act, 2007* and the *Provincial Parks and Conservation Reserves Act, 2006* under the *EBR*
- Environmental Assessment Direction for Municipal Water and Wastewater Projects Proposing an Intra-Basin Transfer
- Pesticide Classification Guideline for Ontario

Ministry of Natural Resources

- Ontario Moose Program Review
- Recovery Strategy for Forest-Dwelling Population of Woodland Caribou
- Identification and Confirmation Procedure for Areas of Natural and Scientific Interest (ANSI)
- Presqu'ile Provincial Park Islands Implementation Planning
- Updated Procedures for Approval of New Special Policy Areas (SPAs) and Modifications to Existing Special Policy Areas under the Provincial Policy Statement, 2005, Policy 3.1.3-Natural Hazards-Special Policy Areas

Ministry of Transportation

- Bill 118, Countering Distracted Driving and Promoting Green Transportation Act, 2008
- Bill 163, Greater Toronto and Hamilton Area Transit Implementation Act, 2009

Ministry of Small Business and Consumer Services and Ministry of Government Services

 Amendments to O. Reg. 216/01 (Certification of Petroleum Equipment Mechanics) under the Technical Standards and Safety Act, 2000

1.1 Ministry of the Environment – Regulation

1.1.1 Proposed extension of the Ministry of Northern Development and Mine's Declaration Orders

Description

- On January 21, 2009, the Ministry of the Environment (MOE) posted an information notice on the Environmental Registry about two declaration orders MNDM-3 (Disposition of certain or all rights to Crown resources) and MNDM-4 (Mine Hazard Rehabilitation Activities issued under the *Environmental Assessment Act (EAA)* (sections 3.1(3) and 3.2 respectively). These declaration orders exempt the subject activities from *EAA* requirements.
- The information notice explained that the Ministry of Northern Development and Mines (MNDM) asked MOE to extend these declaration orders to December 2012 in light of the ongoing work on the modernization of the Mining Act. The rationale for MNDM's request was that "[t]his timeframe would allow for a Class Environmental Assessment (EA) to be developed and approved covering the activities subject to MNDM-3 and MNDM-4 as well as any additional activities identified following a re-evaluation of their EAA requirements." MOE stated that it was considering MNDM's request.
- MOE's rationale for using an information notice was that "Notices of extension of MNDM-3 and MNDM-4 are not instruments, policies, Acts or regulations under the *Environmental Bill of Rights*, 1993 and are therefore not required to be posted for public comment."
- On February 10, 2009, the ECO wrote to MOE, with a copy to MNDM, to express its concern that MOE did not post a regulation proposal notice, as section 16 of O. Reg. 73/94 made under the

EBR states that orders made under *EAA* sections 3.1(3) and 3.2 (and any changes made to them) are deemed to be regulations for the purposes of the *EBR*. The ECO urged MOE to re-post the notice as a regular proposal on the Environmental Registry to provide for full public notice and comment as required under the *EBR*.

On June 10, 2009, MOE posted a further information notice to advise the public that the minister
had decided "to extend the expiry date of the Declaration Orders until December 31, 2012 subject
to the MNDM satisfying new requirements related to the development of a Class Environmental
Assessment (Class EA) for its' activities."

Ministry Response

• MOE responded to the ECO by a letter dated March 18, 2009. MOE explained in its letter that it does not believe that a regulation proposal notice is required because the conditions of the declaration orders provide the authority for the minister to extend their expiry date without preparing new declaration orders. MOE takes the position that "extending the Orders does not constitute the making of a regulation for the purposes of the *EBR*," and therefore a regular notice was not required. MOE further stated that it had voluntarily posted an information notice "in order to promote an open and transparent decision-making process" and that "the intent of the Information Notice is to advise the public of the proposal and also to invite the public to submit written comments to MOE."

ECO Comment

- The ECO continues to believe that MOE should have posted a regular notice regarding the extension of these declaration orders. The ECO has consistently taken the position that a regular notice should be posted on the Environmental Registry to give notice not only of environmentally significant regulations, but of any environmentally significant amendments (such as extending the expiry date) to such regulations. The ECO is disappointed that MOE did not re-post the notice as a regular notice in accordance with the EBR.
- The ECO urges MOE to make better use of the Environmental Registry in the future.

1.1 Ministry of the Environment (and Ministry of Natural Resources) – Regulation

1.1.2 Classifying Instruments Issued Pursuant to the *Endangered Species Act, 2007* and the *Provincial Parks and Conservation Reserves Act, 2006* under the *EBR*

Description

- On March 26, 2009, the Ministry of Natural Resources (MNR) posted an information notice on the Environmental Registry to inform the public that the MNR was proposing to amend O. Reg. 681/04 made under the EBR to classify proposals for instruments under the Endangered Species Act, 2007 (ESA) and the Provincial Parks and Conservation Reserves Act, 2006 (PPCRA). MNR invited the public to comment on the proposal until May 15, 2009.
- Instruments (such as permits, licences, approvals, authorizations, directions or orders issued under an Act) that are classified as proposals under the EBR are subject to public notice and comment through the Environmental Registry.
- MNR stated in the information notice that it was proposing to classify a number of instruments under the ESA and the PPCRA.
- When a ministry proposes to classify instruments issued under laws administered by that ministry, the *EBR* effectively creates two obligations: the ministry must post a notice and consult the public on the specifics of the decisions involved in selecting instruments to be prescribed. Separately and equally, MOE (the ministry responsible for the administration of the *EBR*) must post a proposal to amend O. Reg. 681/94. Normally these dual responsibilities can be discharged by MOE posting

- one regulation proposal notice on the Environmental Registry for a draft regulation amending O. Reg. 681/94.
- On March 27, 2009, the ECO wrote to MNR and MOE to explain that MNR's information notice was not an appropriate approach to consulting the public on the prescribing of instruments under the EBR. The ECO advised the ministries of its expectation that MOE would post a regular regulation proposal notice on the Environmental Registry to reflect MNR's proposed EBR classifications of instruments.

Ministry Response

- MNR responded to the ECO's inquiry by a letter dated May 1, 2009. MNR explained that it does not view the development of a proposal to amend O. Reg. 681/94 as policy as defined in the EBR. MNR stated that "if MOE accepts MNR's proposal for amendments to O. Reg. 681/94, and MOE proposes any changes, a regulation proposal is considered by MOE. At that time, they will decide whether or not to post a proposed amendment on the Environmental Registry." In a second letter from MNR dated May 29, 2009, MNR clarified its position that the information notice was a "proactive information notice prior to any formal regulation proposal notice to draw the public's attention to our commitment to voluntarily post notices that would otherwise be excepted under section 32."
- As of May 2009, MOE has not responded to the ECO's letter.

ECO Comment

- The ECO is disappointed with MNR's response. MNR and MOE both have responsibility for ensuring that the decision is made in a transparent and accountable fashion.
- The ECO urges the ministries to work together to ensure that the public is fully consulted on the EBR classification of instruments issued under the ESA and the PPCRA, and to follow the appropriate procedure for future EBR classifications of instruments issued under these statutes and other legislation.

1.1 Ministry of the Environment - Policy

1.1.3 Environmental Assessment Direction for Municipal Water and Wastewater Projects Proposing an Intra-Basin Transfer

Description

- On March 16, 2009, MOE posted an information notice on the Environmental Registry for a document entitled "Technical Bulletin Environmental Assessment Direction for Municipal Water and Wastewater Projects Proposing an Intra-Basin Transfer."
- The purpose of the Technical Bulletin was to provide interim guidance on how MOE will comment on municipal Class EA water and wastewater projects until regulations under the *Ontario Water Resources Act* supporting the Great Lakes St. Lawrence River Sustainable Water Resource Agreement are in place. The document also provided guidance to municipalities planning water and wastewater projects to ensure consistency with the Agreement.
- On May 1, 2009, the ECO wrote to MOE staff to express disappointment with MOE's use of an information notice, as the Technical Bulletin clearly constituted a policy as defined by the EBR.
 The ECO urged MOE to post a policy proposal notice on the Environmental Registry to provide for full public notice and comment as required by the EBR.

Ministry Response

In late July 2009 MOE staff contacted the ECO by telephone to advise that MOE intended to post a
regular proposal notice shortly. MOE stated that comments received in response to that proposal
would be considered during the drafting of regulations in fall 2009. MOE followed up with a formal

letter on July 30, 2009, explaining that it had intended to post a policy proposal notice for a proposal paper that includes options being considered by the Province relating to intra-basin transfers "relatively soon after the Technical Bulletin was posted on the *EBR*" but that the posting of the policy paper was delayed. MOE confirmed that it hoped to post a proposal notice "in the very near future," and assured the ECO that "it is our intention to provide the public the ability to comment on the implementation of the Agreement."

ECO Comment

The ECO is disappointed that MOE initially used an information notice for this policy, thus denying the public its *EBR* right to notice comment on the proposal. However, the ECO is pleased that MOE intends to post a proper proposal notice on the Environment Registry to fully consult the public prior to drafting the regulations.

1.1 Ministry of the Environment - Policy

1.1.4 Pesticide Classification Guideline for Ontario

Description

- On March 4, 2009, MOE posted a decision notice on the Environmental Registry for a new general regulation, O. Reg. 63/09, made under the *Pesticides Act*. Among other things, the regulation sets out a new pesticide classification system for Ontario.
- In addition to a copy of the regulation, one of the attachments to the decision notice was a finalized document entitled "Pesticide Classification Guideline for Ontario, Version 1.0" dated February 24, 2009 (the "Guideline"). The Guideline provides a detailed explanation of the new system for classifying pesticides set out in O. Reg. 63/09, including two decision-making flowcharts for pesticide classification.
- MOE did not post a separate policy proposal notice for the Guideline, nor did it provide a draft of the Guideline for public comment when it consulted the public on the draft regulation.
- On May 12, 2009, ECO staff wrote to MOE to express disappointment that MOE had not undertaken public consultation on the Guideline, as the Guideline constitutes "policy" as defined in the EBR. The ECO asked the ministry to provide information regarding: how it determined the environmental significance of the Guideline; how it considered its Statement of Environmental Values (SEV); why it chose not to post the Guideline on the Registry; and whether the ministry undertook other public consultation in the development of the Guideline.

Ministry Response

On May 28, 2009, the ECO received a response from MOE. MOE defended its decision not to post
a separate proposal notice for the Guideline on the basis that "the guideline was developed as part
of the final regulation, as a direct result of public comments received on the draft regulation." MOE
also stated, "we do not see this decision as a significant change in policy but rather an opportunity
to present the criteria, with the same legal force, in a form that was easier to comprehend."

ECO Comment

• While the ECO understands that this Guideline was developed as a result of the consultation process on O. Reg. 63/09, the ECO remains disappointed that MOE did not undertake separate consultation on a draft of the Guideline before it was finalized. Although it is incorporated by reference in the regulation, the Guideline constitutes policy. Portions of the Guideline go beyond the specific provisions of the regulation; for example, the decision-making flow charts elaborate on the classification process. The Guideline also interprets the regulation by providing examples to explain specific provisions. The public was deprived of its rights under the EBR to notice and comment about this environmentally significant policy.

1.2 Ministry of Natural Resources - Policy

1.2.1 Ontario Moose Program Review

Description

- On May 6, 2008, MNR posted an information notice entitled "Ontario Moose Program Review –
 Phase 1: Information Package and Questionnaire." The purpose of the notice was to provide
 general notice to the public about Phase 1 of Ontario's Moose Program Review, which was
 scheduled to be conducted during spring/summer 2008. The information notice solicited public
 comment via a questionnaire.
- On May 28, 2009, ECO staff contacted MNR staff expressing the ECO's concern that the
 information notice contained environmentally significant policy proposals (albeit at a preliminary
 stage). The ECO requested that the proposal be re-posted on the Environmental Registry using a
 regular notice. The ECO also requested that MNR provide copies of all public comments, including
 a summary of the completed questionnaires that MNR receives and all written submissions from
 stakeholder groups. ECO staff also contacted MNR staff by phone on June 9, 2008.

Ministry Response

- On June 12, 2008, MNR staff responded to the ECO by email and explained that the information notice was intended to invite the public "to share their ideas on how they think the Ministry should manage moose populations today and into the future." MNR staff noted that MNR intended "to use the input (together with that from other meetings/sessions with other interested people/stakeholders and Aboriginal people) to help inform the development of any new policy proposals/changes to the moose management program." MNR staff stated that any proposed policy changes will be posted on the Environmental Registry as policy proposal notices inviting public comment.
- MNR staff agreed to provide the ECO will all public comments, including a summary of completed questionnaires and all written submissions from stakeholders and groups.
- MNR assured the ECO that "we value the role the EBR process plays in our policy and program
 development initiatives and want to ensure we are using it to its fullest capability," and agreed to
 provide the ECO will all public comments, including a summary of completed questionnaires and all
 written submissions from stakeholders and groups.

ECO Comment

- The ECO is disappointed with MNR's response. Inviting the public "to share their ideas on how they think the Ministry should manage moose populations today and into the future" is nothing if not public consultation about environmentally significant policy. MNR should have undertaken this consultation using a policy proposal notice in accordance with the EBR, so that the ECO could review MNR's use of the public's comments and compliance with the Act.
- The ECO has repeatedly encouraged ministries to make use of the Environmental Registry at
 multiple stages in the development of environmentally significant policies, Acts and regulations.
 MNR could have posted a regular notice on the Environmental Registry for this initial stage of
 consultation, and then posted additional proposal notices as specific policies for managing moose
 populations were developed.

1.2 Ministry of Natural Resources – Policy

1.2.2 Recovery Strategy for Forest-Dwelling Population of Woodland Caribou

Description

- On August 21, 2008, MNR posted an information notice on the Environmental Registry entitled "Recovery Strategy for Forest-dwelling Woodland Caribou (Rangifer tarandus caribou) in Ontario." The information notices provided a copy of the completed recovery strategy for this threatened species, and noted that MNR would begin to prepare a government response in accordance with the Endangered Species Act, 2007 (ESA). The ESA requires that MNR prepare a government response, outlining what actions it will take to protect and recover the species in question, within nine months of receiving a completed recovery strategy.
- The information notice did not provide any opportunity for public input on MNR's preparation of its government response.
- Prior to the ESA coming into force, ECO staff had met with MNR staff several times to develop a
 mutually satisfactory process for MNR's use of the Environmental Registry in the administration of
 the ESA.
- On September 9, 2008, the ECO emailed MNR staff to express deep concern that MNR was not
 following the agreed process for posting notices related to the development of government
 responses to recovery strategies on the Environmental Registry. The ECO noted that MNR's
 failure to abide by the agreed process called into question whether MNR would comply with the
 agreed process for other aspects of the administration of the ESA. The ECO requested that MNR
 post a policy proposal notice on the Environmental Registry that accurately reflected the agreedupon process.

Ministry Response

- On September 29, 2008, MNR staff responded to the ECO by email. MNR recognized the requirement under the ESA to develop a government response within nine months from the August 21, 2008 release of the recovery strategy. MNR stated that it was developing a Caribou Conservation Plan (CCP) (for which a regular policy proposal was posted on the Environmental Registry) and drafting a habitat regulation, which MNR stated may form all or part of MNR's response to the recovery strategy. MNR also stated that it wanted to "ensure comprehensive stakeholder consultation, Aboriginal and public engagement at all stages throughout the process" of implementing the ESA.
- MNR did not comply with the ECO's request to post a policy proposal notice on the Environmental Registry.

ECO Comment

- The ECO is extremely disappointed with MNR's response. The purpose of developing an agreed process for providing notice on the Environmental Registry was to ensure that MNR administered the ESA in a manner that was consistent with MNR's legal responsibilities, and to ensure public accountability and transparency in the protection and recovery of species at risk.
- The ECO urges MNR to follow the agreed-upon process for posting all future environmentally significant policies (including government responses to recovery strategies), regulations and instruments related to the *ESA* on the Environmental Registry.

1.2 Ministry of Natural Resources - Policy

1.2.3 Identification and Confirmation Procedure for Areas of Natural and Scientific Interest (ANSI)

Description

- On September 19, 2008, MNR posted an information notice on the Environmental Registry about the ministry's Identification and Confirmation Procedure for Areas of Natural and Scientific Interest (ANSIs) issued on August 13, 2008. This procedure document replaced an earlier version of the document dated April 2000.
- The Identification and Confirmation Procedure sets out the ministry's procedure for identifying and confirming the status and boundaries of ANSIs.
- MNR also used an information notice to post the April 2000 version of this policy; the ECO drew attention to this inappropriate use of an information notice in our 2000/2001 Annual Report.
- On November 21, 2008, the ECO wrote to MNR to convey the ECO's disappointment with MNR's
 use of an information notice regarding the revised procedure document, and reminded MNR that
 information notices should only be used when the ministry is not required to post a regular notice
 for public comment under sections 15, 26 or 22 of the EBR.

Ministry Response

- On December 18, 2008, ministry staff contacted ECO staff to advise that it would like to set up a
 meeting with the ECO to discuss this issue.
- On February 9, 2009, ECO staff met with staff from MNR. MNR explained that it believed that an
 information notice was appropriate, as the revised procedure did not change policy direction, but
 simply incorporated existing practice into the procedure document. MNR also stated that the
 document was largely science (not policy) and therefore did not merit public consultation.
- In May 2009, MNR wrote to the ECO to advise that ministry staff had "carefully considered MNR's approach to using an Information Notice on the Environmental Registry" and that the ministry would be re-posting the ANSI confirmation procedure as a regular policy proposal.

ECO Comment

- The ECO disagrees with MNR's original position that the revised ANSI procedure does not contain new policy. The August 2008 revisions to the procedure set out selection criteria to be used to evaluate candidate ANSIs that were not included in the previous version. The ECO is also concerned about MNR's position that it need not consult on this procedure document because it is primarily scientific. The *EBR* does not make this distinction.
- The ECO is therefore very pleased to have received MNR's May 2009 letter stating that it would repost the ANSI confirmation procedure as a regular policy proposal notice. However, as of late July 2009, MNR had not re-posted the notice.

1.2 Ministry of Natural Resources – Policy

1.2.4 Presqu'ile Provincial Park Islands Implementation Planning

Description

- On November 24, 2008, MNR posted an information notice on the Environmental Registry to notify
 the public that project planning for cormorant and deer management and vegetation restoration on
 the islands at Presqu'ile Provincial Park was being carried out under the Class Environmental
 Assessment for Provincial Parks and Conservation Reserves (Class EA).
- The ECO sent a letter to MNR on December 5, 2008 expressing concern with MNR's use of an information notice rather than regular consultation under the EBR for this environmentally

significant policy. The ECO expressed deep concern that MNR's choice may have the effect of limiting public scrutiny by circumventing the proper *EBR* public consultation process and limiting the ECO's ability to report to the Ontario Legislature on this initiative.

• The ECO strongly urged MNR to post a regular proposal notice on the Environmental Registry to provide for full public notice and comment as required under the *EBR*.

Ministry Response

- At MNR's request, ECO staff met with MNR on February 9, 2009.
- MNR explained that it considered this project planning to be an undertaking under MNR's Class EA, and not a policy proposal. MNR also stated that it has policy in place on cormorant management, and that it was mainly implementing that policy.
- MNR noted that public consultation would occur pursuant the Class EA. MNR believes that a
 higher quality of consultation results from using its Class EA stakeholder lists than soliciting
 province-wide comments using the Environmental Registry.
- In May 2009, MNR responded to the ECO's December 2008 letter, confirming its position that "project implementation activities, such as the resource management implementation plan at Presqu'ile, are not considered policy" and that the implementation plan does not contain new policy.

ECO Comment

- The ECO disagrees with MNR's position that consultation under the EBR was not required, and is
 disappointed that MNR refused to post a regular notice on the Environmental Registry. Section 32
 of the EBR exempts instruments under the Environmental Assessment Act, not policies. Further,
 the Class EA for Provincial Parks and Conservation Reserves is not intended to be used for the
 preparation of management direction or area policies.
- The ECO is deeply troubled that MNR views the Class EA process as preferable to the EBR consultation process. The ECO is concerned that MNR is characterizing policies and programs as falling under the EA process in cases where that may not be appropriate. The ECO urges MNR to reconsider its approach for future policy development related to projects covered by this Class EA and others, and to make full use of the Environmental Registry to allow for transparent and open consultation with the general public, rather than limiting consultation to a smaller group of stakeholders.

1.2 Ministry of Natural Resources – Policy

1.2.5 Updated Procedures for Approval of New Special Policy Areas (SPAs) and Modifications to Existing SPAs under the Provincial Policy Statement, 2005, Policy 3.1.3-Natural Hazards-Special Policy Areas

Description

- On February 9, 2009, MNR posted an information notice on the Environmental Registry for "Updated Procedures for Approval of New Special Policy Areas (SPAs) and Modifications to Existing SPAs under the Provincial Policy Statement, 2005 (PPS, 2005), Policy 3.1.3-Natural Hazards-Special Policy Areas."
- An SPA is an area within a community that has historically existed in the flood plain and where site-specific policies, approved by both the Ministers of Natural Resources and Municipal Affairs and Housing, are intended to provide for the continued viability of existing uses and address the significant social and economic hardships to the community that would result from strict adherence to provincial policies concerning development. The criteria and procedures for approval are established by the Province.

- The posted document updates SPA approval procedures to reflect changes in the *Planning Act*, PPS, 2005 and the Growth Plan for the Greater Golden Horseshoe, 2006. The document also creates a new procedure for modifying SPAs. The new procedures replace Appendix 5 of the 'Technical Guide River and Stream Systems Flood Hazard Limit."
- MNR stated in the information notice that "the changes to the procedural SPA approvals document are administrative only and do not contain any new policies, regulations or other related changes in standards."
- On March 19, 2009, the ECO wrote a letter to MNR expressing the ECO's disagreement with MNR's description of the updated procedures as "administrative." The ECO noted that the procedure for modifications to existing SPAs represented new policy, and that a regular proposal notice should have been used to consult on this part of the updated document, at a minimum. The ECO asked the ministry to provide information regarding: how it determined the environmental significance of the policy; how it considered its Statement of Environmental Values (SEV); why it chose not to post the policy on the Registry; and whether the ministry undertook other public consultation in the development of the policy.

Ministry Response

As of May 2009, MNR had not responded to the ECO's request.

ECO Comment

• The ECO is disappointed with MNR's failure to provide an explanation for not posting a regular proposal to give notice of the changes to this environmentally significant policy.

1.3 Ministry of Transportation – Act

1.3.1 Bill 118, Countering Distracted Driving and Promoting Green Transportation Act, 2008

Description

- On October 28, 2008, Bill 118, Countering Distracted Driving and Promoting Green Transportation Act, 2008, received first reading in the Ontario Legislature. It received Royal Assent on April 23, 2009
- The Act contained environmentally significant provisions, as it would amend the *Public Vehicles Act* to facilitate the use of car pooling in Ontario in order to reduce harmful emissions, ease traffic congestion and fight climate change.
- The Ministry of Transportation (MTO) did not initially post a notice on the Environmental Registry regarding Bill 118.
- On December 5, 2008, the ECO sent a letter to MTO urging MTO to post a proposal about Bill 118 on the Environmental Registry for public notice and comment.

Ministry Response

- On December 23, 2008, MTO posted an Act proposal notice on the Environmental Registry for a 30-day comment period.
- MTO responded to the ECO in a letter dated March 9, 2009, apologizing for the delay in posting a
 notice and confirming that a decision notice would be posted in accordance with EBR
 requirements.

ECO Comment

• The ECO is pleased that MTO agreed to the ECO's request and posted an Act proposal notice on the Environmental Registry. However, MTO should have posted the notice when Bill 118 was first introduced in the Legislature. Fortunately, in this case MTO's delay did not impede the public's ability to receive notice of and provide meaningful comment on the proposal.

Although Bill 118 received Royal Assent on April 23, 2009, as of late July 2009 MTO had not
posted a decision notice on the Environmental Registry. The ECO hopes that MTO will quickly
remedy this.

1.3 Ministry of Transportation – Act

1.3.2 Bill 163, Greater Toronto and Hamilton Area Transit Implementation Act, 2009

Description

- On March 30, 2009, Bill 163, the *Greater Toronto and Hamilton Area Transit Implementation Act,* 2009, received first reading in the Ontario Legislature.
- The bill would amend the *Greater Toronto Transportation Authority Act, 2006* to facilitate implementation of the Regional Transportation Plan (RTP) for the Greater Toronto and Hamilton Area. According to the Minister of Transportation, "these projects would mean reducing congestion and greenhouse gas emissions to protect the environment and improve the quality of life for our families and communities."
- The Ministry of Transportation (MTO) did not initially post a notice on the Environmental Registry regarding Bill 163.
- On April 3, 2009, the ECO emailed ministry staff to enquire whether the ministry would be posting a notice for the bill.

Ministry Response

- On April 10, 2009, ministry staff advised the ECO by telephone that MTO would be posting an
 information notice about Bill 163. MTO stated that it had already consulted the public on the draft
 RTP through various notices on the Environmental Registry. Further, MTO noted that the bill would
 be proceeding to Committee on April 22, 2009, and so a full 30-day public comment period as
 required by the EBR would not be possible before the bill was beyond amendment stage.
- The ECO advised ministry staff that it would be inappropriate to use an information notice for Bill 163, as the ministry is required to provide notice of proposed Acts that are environmentally significant under section 15 of the EBR. The ECO noted that it has consistently taken the position that a ministry should provide a new public comment period when a bill is introduced for first reading in the Legislature, even where there has been earlier consultation on the policy underlying the proposed legislation. The ECO also noted that if the legislative timetable would not allow for a full 30-day comment period as required under the EBR, a consultation period of less than 30 days would be acceptable. On April 14, 2009, the ECO wrote to MTO to convey the ECO's views in writing.
- On April 17, 2009, MTO staff reported to the ECO that it would post a regular notice shortly.
- On April 20, 2009, MTO posted a regular policy proposal notice for Bill 163 on the Environmental Registry. The notice provided a 30-day comment period, but stated that "interested parties should be made aware that this bill passed second reading in the Legislature on April 6, 2009, and has been forwarded for review by the Standing Committee on Finance and Economic Affairs. The public is encouraged to submit any comments by April 23, 2009." On April 21, 2009, MTO reposted the notice as an Act proposal notice.
- MTO wrote to the ECO on May 6, 2009 to confirm that it had posted a proposal notice on the Environmental Registry, and to thank the ECO for our advice.

ECO Comment

MTO was very cooperative in response to the ECO's communications. The ECO is pleased that
MTO complied with the ECO's request and posted a regular notice instead of an information notice.
The ECO is also pleased that MTO re-posted the notice as an Act proposal notice, as the initial use
of a policy proposal notice was inappropriate. The ECO urges MTO to post proposals for Acts on
the Registry promptly, in order to avoid this situation in the future.

1.4 Ministry of Small Business and Consumer Services and Ministry of Government Services - Regulation

1.4.1 Amendments to O. Reg. 216/01 (Certification of Petroleum Equipment Mechanics) under the Technical Standards and Safety Act, 2000

Description

- On July 16, 2008, the Ontario government filed O. Reg. 251/08, which amended O. Reg. 216/01 (Certification of Petroleum Equipment Mechanics) made under the *Technical Standards and Safety Act*, 2000 (*TSSA*). The regulation was printed in the Ontario Gazette on August 2, 2008.
- The *TSSA* is prescribed for limited purposes under the *EBR*. The amendments to O. Reg. 216/01 fall under this limited *EBR* application, as the regulation relates to petroleum equipment, which is a matter to which the former *Gasoline Handling Act* would have applied. Further, the amendments to O. Reg. 216/01 are environmentally significant, as the type of work on petroleum equipment referred to in the regulation, if not undertaken properly by qualified professionals, could result in discharges of petroleum products to the environment.
- No notice was posted on the Environmental Registry for O. Reg. 251/08.
- The Ministry of Government Services (MGS) was responsible for the *TSSA* during the time immediately preceding the filing of the regulation; however, shortly thereafter, the Ministry of Small Business and Consumer Services (MSBCS), assumed responsibility for the administration of the *TSSA*.
- On October 10, 2008, the ECO sent a letter to MGS, with a copy to MSBCS, reminding the ministry of its obligation under the EBR to post proposal notices for environmentally significant regulations on the Environmental Registry for public notice and comment. The ECO also asked the ministry to provide information regarding: how it determined the environmental significance of the regulation; how it considered its Statement of Environmental Values (SEV); why it chose not to post the regulation on the Environmental Registry; and whether the ministry undertook other public consultation in the development of the regulation.

Ministry Response

As of May 2009, neither MGS nor MSBCS had responded to the ECO's letter.

ECO Comment

- The ECO is disappointed that MGS failed to respond to the ECO's inquiries. Although it was too late to consult the public on the amendments to O. Reg. 216/01(as O. Reg. 251/08 was already filed), providing the information that the ECO requested could have assisted the ECO in our review of the ministry's compliance with the EBR. As it stands, the ECO can only conclude that MGS did not have a valid rationale that would explain its failure to comply with it is EBR obligations.
- The *TSSA* is a prescribed statute under the *EBR*, and the ECO strongly believes the ministry responsible for its administration must adhere to the *EBR* requirements associated with that legislation. The ECO is therefore pleased to have learned in March 2009 that MSBCS is completing the final approvals to be prescribed under the *EBR*.

For more information on prescribing MSBCS under the *EBR*, refer to Section 11 – Status of ECO and Public Requests to Prescribe New or Existing Ministries for Laws, Regulations or Processes Under the *EBR*, of this Supplement.

SECTION 2

ECO REVIEWS OF INFORMATION NOTICES

SECTION 2: ECO REVIEWS OF INFORMATION NOTICES

2.1 Use of Information Notices

In cases where provincial ministries are not required to post a proposal notice on the Environmental Registry for public comment, they may still provide a public service by posting an "information notice" under section 6 of the *EBR*. These notices keep Ontarians informed of important environmental developments.

Ministries should use an information notice only when they are not required to post a regular notice for public comment (under sections 15, 16 or 22 of the *EBR*). Significant differences exist between regular proposal notices posted on the Environmental Registry and information notices. With regular proposal notices, a ministry is required to consider public comments and post a decision notice explaining the effect of comments on the ministry's decision. The ECO then reviews the extent to which the minister considered those comments when he or she made the final decision. Ministries must also consider their Statement of Environmental Values in the decision-making process. Third-party appeal rights are only available for instruments if they are posted as regular proposal notices. This approach is superior to posting an information notice and provides greater public accountability and transparency.

As described in more detail in the ECO's 2000/2001 Annual Report, if a prescribed ministry decides that it is appropriate to seek public comment on a policy, Act or regulation proposal through the Registry, the correct procedure is to post a proposal notice, not an information notice. Soliciting comments through information notices causes confusion for the public, since, as noted above, there is no legal requirement for the ministries to consider public comments or to post a final decision notice explaining how comments were considered. The ECO accepts, however, that it may be appropriate for ministries to use information notices to solicit comments on initiatives that are clearly exempted from the *EBR* posting requirements, for example *Environmental Assessment Act (EAA)* exceptions and regulations that are not prescribed under the *EBR*. The ECO encourages ministries in this situation to post a follow-up notice informing the public about the decision and how comments were considered.

The ECO encourages all prescribed ministries, particularly MOE and MNR, to clearly articulate the rationale for exemption from public comments (e.g., administrative changes, posting of a report written by a third-party, etc.) in all information notices posted on the Environmental Registry. In the 2008/2009 reporting period, the ECO notes that many ministries merely re-stated the purpose of the information notice in the "rationale for exemption" section of the notice, rather than providing an explanation for the exemption from public comment requirements under the *EBR*. By clearly articulating the rationale for the exemption, ministries will avoid any confusion on the part of the public or the ECO as to whether an information notice was a legitimate use of the Environmental Registry.

During the 2007/2008 reporting year, 12 ministries posted a total of 114 information notices. However, for the purposes of tracking year-to-year trends, the ECO does not double-count repostings of previous initiatives (as ministries often post updates on information notices), or notices that relate to Forest Management Plans. In 2007/2008, the ECO excluded 24 updates to existing notices, and 14 notices relating to Forest Management Plans. Accordingly, for ECO tracking purposes, the ministries posted 76 information notices in 2007/2008.

Ministry	Number of Information Postings
Energy (ENG) (in June 2008, became the Ministry of Energy	1
and Infrastructure)	
Energy and Infrastructure (MEI) (formally the Ministry of	1
Energy and the Ministry of Public Infrastructure Renewal)	
Environment (MOE)	32
Government Services (MGS)	1
Health and Long-term Care (MOHLTC)	1
Health Promotion (MHP)	2
Labour (MOL)	1
Municipal Affairs and Housing (MAH)	2
Natural Resources (MNR)	24
Northern Development and Mines (MNDM)	4
Public Infrastructure and Renewal (PIR) (in June 2008,	3
became the Ministry of Energy and Infrastructure)	
Transportation (MTO)	4

Good Uses of Information Notices:

Several ministries used information notices appropriately during this reporting period to inform the public about initiatives that are legally excepted from the requirement to post regular proposal and decision notices. For example:

- MNR posted a notice informing the public of the release of the State of the Forest Report, 2006. The report summarizes the status of sustainable forest management in Ontario over a five-year period from April 1999 to March 2004, as required by the *Crown Forest Sustainability Act, 1994*. MNR indicated that the report also fulfills a condition of the Environmental Assessment Board's Order made under the *Environmental Assessment Act*, Declaration Order (MNR-71, as amended by MNR-71/2) regarding its Class Environmental Assessment Approval for Forest Management on Crown Lands in Ontario.
- MOE used an information notice to advise the public of an "Acoustic Consulting Report:
 Prepared for the Ontario Ministry of the Environment Wind Turbine Facilities Noise Issues".
 MOE indicated that the report is part of its wind turbine noise policy review. MOE also stated that any proposed changes to the noise guidelines for wind turbines as a result of the review will be posted on the Environmental Registry for public comment.
- MNR posted a notice informing the public of the interim report on Ontario's biodiversity made by
 the Ontario Biodiversity Council for the year 2008. The report fulfills a requirement of Ontario's
 Biodiversity Strategy to provide an overview of the state of biodiversity in Ontario. The report
 includes a discussion of biodiversity threats and examples of conservation actions being
 undertaken across the province.
- MOE used an information notice to invite the public to participate in pre-consultation on the development or update of proposed air standards for eight substances. The eight substances include uranium; nickel; chromium (hexavalent) and other compounds (divalent& trivalent); benzene; polycyclic aromatic hydrocarbons (PAHs); 1,3, butadiene; dioxins and dioxin-like compounds; and manganese and compounds. MOE stated that the development of air quality standards for the eight substances would involve two steps. Pre-consultation is the first step and the second step is to post a proposal on the Environmental Registry for public comment.
- MOE posted a notice informing the public of new individual Accreditation Agreements for drinking water testing laboratories. MOE stated that the new agreements will replace the Tripartite Agreement between MOE, the Standards Council of Canada (SCC) and the Canadian

Association for Environmental Analytical Laboratories (CAEAL) established in 2003. The Minister of the Environment is required under the *Safe Drinking Water Act, 2002* to designate an accrediting body (or bodies) for drinking water testing laboratories.

MOE posted two information notices for proposed changes to Sulphur Dioxide Control Orders for two smelter facilities in Sudbury. MOE stated that the Control Orders would be amended to incorporate the requirements of Ontario Regulation 419/05 (Air Pollution – Local Air Quality) under the *Environmental Protection Act*, including the Alteration of Standards Process. The information notice states that these amendments are "predominantly administrative and will not result in any significant impacts to the environment as emissions levels of SO2 will not change." MOE advised the ECO that provided the company applies for an alteration of standards by 2010, emissions levels will remain in accordance with the original control order until 2015 or until the application is decided by MOE (whichever is first). The ECO urges MOE to consult the public before the current emissions levels are potentially changed.

Inappropriate Uses of Information Notices:

On several occasions ministries used information notices inappropriately during this reporting period, stating that the initiatives were not "policy decisions" for a variety of reasons. For example:

- MGS should have posted a regular proposal for the new standards for the acquisition of paper and printing services. The ECO does not agree that the decision is purely administrative and the ECO does believe that it is an environmentally significant decision. The new procurement policy requires that virgin bulk paper purchased be certified by the Forest Stewardship Council, the Sustainable Forestry Initiative or the Canadian Standards Association. In addition, the Ontario Government will make double-sided printing and copying the standard for in-house printers and copiers. The ECO notes that all environmentally significant policy changes, even positive ones, need to be posted as full proposal notices on the Registry.
- MNR should have posted a regular proposal notice for its Ontario Moose Program Review –
 Phase 1: Information Package and Questionnaire. The purpose of the notice was to provide
 general notice to the public about phase one of a two phase review. Phase one focused on
 moose management, population objectives and management tools. MNR characterized the
 posting as pre-consultation. The ECO believes that the information notice contained an
 environmentally significant policy proposal. (For further details on this notice, see the section on
 "Unposted Decisions" in this Supplement.)
- MOE should have posted a regular proposal notice for its extension of two Ministry of Northern Development and Mine's Declaration Orders issued under the *Environmental Assessment Act* (*EAA*). The two declaration orders, MNDM-3 (Disposition of certain or all rights to Crown resources) and MNDM-4 (Mine Hazard Rehabilitation Activities) issued under the *EAA* (sections 3.1(3) and 3.2 respectively), exempt the subject activities from *EAA* requirements. The ECO believes it was inappropriate for MOE to use an information notice to solicit public comments, as section 16 of O. Reg. 73/94 made under the *EBR* states that orders made under *EAA* sections 3.1(3) and 3.2 (and any changes made to them) are deemed to be regulations for the purposes of the *EBR*. (For further details on this notice, see the section on "Unposted Decisions" in this Supplement.)
- MNR should have posted a regular proposal notice for its updated Procedures for Approval of New Special Policy Areas (SPAs) and Modifications to Existing SPAs under the Provincial Policy Statement, 2005 (PPS, 2005), Policy 3.1.3-Natural Hazards-Special Policy Areas. A SPA is a built-up area within a community that has historically existed in the flood plain and where site-specific policies, approved by both the Ministers of Natural Resources and Municipal Affairs and Housing, are intended to provide for the continued viability of existing uses and address the significant social and economic hardships to the community that would result from strict adherence to provincial policies concerning development. The document updates SPA approval procedures to reflect recent changes in land use planning legislation (e.g., PPS, 2005 and the

Planning Act) and the document creates a new procedure for modifying SPAs. While the updated approval procedures represent an administrative amendment, the ECO believes that the modification procedures represent new environmentally significant policy. (For further details on this notice, see the section on "Unposted Decisions" in this Supplement.)

• MOE should have posted a regular proposal notice for its Environmental Assessment Direction for Municipal Water and Wastewater Projects Proposing an Intra-Basin Transfer. The purpose of the direction was to provide interim guidance on how MOE will comment on municipal Class Environmental Assessment water and wastewater projects until regulations under the *Ontario Water Resources Act* supporting the Great Lakes St. Lawrence River Sustainable Water Resource Agreement are in place. The document also provided guidance to municipalities planning water and wastewater projects to ensure consistency with the Agreement. The ECO believes that the direction clearly constitutes policy as defined by the *EBR*. (For further details on this notice, see the section on "Unposted Decisions" in this Supplement.)

The ECO recognizes that both MOE and MNR voluntarily post more information notices on the Registry than any other ministry to inform the public of environmentally significant matters not prescribed under the *EBR*. The ECO encourages MOE and MNR to continue with their diligent use of information notices to inform the public on matters that are not prescribed. MNR and MOE could be said to be the victims of "tall poppy syndrome" with respect to their use of information notices on the Environmental Registry. "Tall poppy syndrome" is a term used to describe a societal phenomenon in which people of merit are criticized because their successes elevate them above or distinguish them from their peers. The ECO stresses that the Environmental Registry should be used in an appropriate fashion – prescribed policies should be posted as policy proposal notices and not as information notices.

Ministry Decisions that are not Prescribed:

Various ministries voluntarily posted environmentally significant decisions as information notices because they fall under ministries, Acts, or instruments that are not prescribed under the *EBR*. Examples this year include:

- MOE posted an information notice for three draft Certificates of Approval (i.e., sewage works, waste disposal, and air) under the *Environmental Protection Act* and the *Ontario Water Resources Act* for a renewable energy thermal electric power plant. Since the project is subject to Ontario Regulation 101/07 (Waste Management Projects) under the *EAA*, MOE was not required to post a regular instrument notice.
- MOE posted two information notices on behalf of the Ministry of Health Promotion (MHP) seeking public input on two reports: "The Review of Legislation Affecting Trails Report on Options"; and "Ontario Trails Strategy Study on Reducing Conflicts Associated with Recreational Use of Off-Road Vehicles." The MHP is not yet a prescribed ministry under the EBR. The ECO notes that our office has been requesting that MHP be prescribed under the EBR since June 2006 (see Section 11 of this Supplement for a more detailed discussion of the issue of prescribing MHP.)
- MEI posted one information notice and PIR posted three information notices as the ministries are
 not yet prescribed under the EBR. In June 2008, the former ENG and PIR merged into MEI.
 The ECO notes that our office has been requesting that PIR be prescribed under the EBR ever
 since the ministry was created in 2004. In March 2009, MEI advised the ECO that it was
 completing final approvals for prescription under the EBR. (See Section 11 of this Supplement
 for a more detailed discussion of the issue of prescribing MEI.)
- MOE posted 10 information notices for the approval of 10 Terms of Reference documents
 prepared by multi-stakeholder Source Protection Committees under the *Clean Water Act, 2006*.
 Source Protection Committee Terms of Reference are not prescribed as instruments under the *EBR*. However, the *Clean Water Act* requires MOE to publish a notice on the Environmental
 Registry once Terms of Reference are approved by the Minister of the Environment.

• MNR posted four information notices for proposed permits issued under the *Endangered Species Act*, 2007 (ESA). These permits are not yet prescribed as instruments under the *EBR*; however, on March 26, 2009, MNR posted an information notice indicating that it proposes to prescribe these permits as instruments under the *EBR*. (For further details on this notice, see Section 1 on "Unposted Decisions" in this Supplement.) The ECO notes that in our Special Report (February 2009), we recommended that "all instruments that may be issued pursuant to the *ESA* and its regulations be prescribed under the [*EBR*]." In addition, the ECO requested that the MNR post information notices for all instruments issued under the *ESA* until these instruments are prescribed under the *EBR*.

The ECO supports the ministries' approach to posting information notices for proposals and decision that are not prescribed. However, as previously recommended, the ECO continues to urge the government to prescribe new government laws and initiatives that are environmentally significant under the *EBR* within one year of implementation to ensure that environmentally significant decisions are appropriately posted. (See Section 11 of this Supplement for a more detailed discussion of the issue of prescribing ministries and Acts.)

Summary of all New Information Notices Posted during the 2008/2009 Reporting Year

EBR Registry Number	Туре	Title	Ministry's Rationale for Information Notice	Date Published
Ministry o	f Energy (in	June 2008, became the Ministry of	Energy and Infrastructure)
010-3874	ENG Regulation	Decision on clothesline regulation under the <i>Energy Conservation Leadership Act, 2006</i> (the "Act") to encourage and permit the use of outdoor clotheslines	Act not prescribed	June 13, 2008
Ministry o		d Infrastructure (formally the Minist	ry of Public Infrastructure	Renewal and
010-5109	MEI Policy	Size and Location of Urban Growth Centres in the Greater Golden Horseshoe	Ministry not yet prescribed	November 7, 2008
Ministry o	f the Enviro	nment		
010-2525	MOE Report	Final Report of the Noise Expert on Wind Turbine Facilities Noise Issues	Expert report for MOE – not policy	April 28, 2008
010-1475	MOE Policy	Guidelines for identifying, assessing and managing contaminated sediments in Ontario - an integrated approach	Compilation of other documents – not new policy	May 02, 2008
010-0348	MOE Regulation	Decision to approve a request by Nelson Aggregate Co. for a regulatory amendment under the Consolidated Hearings Act to allow for a joint board hearing that includes an application under the	Act not prescribed	May 06, 2008

EBR Registry Number	Туре	Title	Ministry's Rationale for Information Notice	Date Published
		Aggregate Resources Act for its Burlington Quarry extension		
010-3469	MOE Instrument	Draft Permit to Take Water for St. Marys Cement Pumping Test	Instrument is not prescribed	May 07, 2008
010-3135	MOE Notice	Reporting Requirements for Phase One Industrial or Commercial Water Users under Section 4 of Ontario Regulation 450/07: Charges for Industrial and Commercial Water Users	Not policy	May 07, 2008
010-3137	MOE Notice	New Requirement to Obtain a Permit To Take Water (PTTW) for Some Types of Grandfathered Water Takers	Not policy	May 07, 2008
010-3114	MOE Regulation	A regulatory amendment under the Consolidated Hearings Act to allow for a Joint Board hearing that includes an application under the Aggregate Resources Act for the Walker Aggregates Inc. Duntroon Quarry extension	Act not prescribed	May 13, 2008
010-4081	MOE Notice	Update: Accrediting bodies for drinking water testing laboratories under the Safe Drinking Water Act, 2002 (SDWA)	Agreement is not a prescribed instrument and not new policy	July 16, 2008
010-4084	MOE Instrument	Applications for Certificates of Approval by Liberty Energy Inc., for an undertaking carried out in accordance with Ontario Regulation 101/07 made under the Environmental Assessment Act.	Instrument not prescribed	August 21, 2008
010-4433	MOE Regulation	Amendment to Ontario Regulation 231/08- Transit Projects and Greater Toronto	Amendment administrative in nature	August 22, 2008
010-4441	MOE Notice	Invitation to pre-consultation science meetings regarding new and updated air standards for eight substances	No decision/ pre- consultation (will re-post as proposed policy)	October 3, 2008
010-4759	MOE Regulation	Amendment to Regulation 116/01 under the <i>Environmental</i> Assessment Act	Amendment administrative in nature	October 3, 2008
010-4648	MOE Instrument	Renewal of Nestlé Waters Canada's Permit to Take Water	Administrative instrument amendment	October 3, 2008
010-4431	MOE Regulation	Decision to approve a request by Walker Aggregates Inc. for a regulatory amendment under the Consolidated Hearings Act to allow	Regulation not prescribed; amendment administrative in nature	October 14, 2008

EBR Registry Number	Туре	Title	Ministry's Rationale for Information Notice	Date Published	
		for a Joint Board hearing that includes an application under the <i>Aggregate Resources Act</i> for its Duntroon Quarry extension.			
010-4981	MOE Notice	Information note concerning proposed amendments to Regulation 347 under the Environmental Protection Act (Environmental Protection Act, R.S.O. 1990)	Not policy; using registry to inform public of regulation proposal by OMAFRA	October 27, 2008	
010-5557	MOE Notice	Western Climate Initiative Greenhouse Gas Emission Reporting Proposal	Not new policy; proposal report by multi-state and multi-province effort	January 07, 2009	
010-5527	MOE Declaration Order	Proposed extension of the Ministry of Northern Development and Mine's Declaration Orders (Environmental Assessment Act, R.S.O. 1990)	Not prescribed	January 21, 2009	
010-4892	MOE Instrument	Temporary Certificates of Approval for St. Marys Cement Canada Inc. to conduct an alternative fuels research project at the Bowmanville Plant (Environmental Protection Act, R.S.O. 1990)	Section 32 exemption - EAA	February 05, 2009	
010-4894	MOE Instrument	Temporary Certificates of Approval for St. Marys Cement Canada Inc. to conduct an alternative fuels research project at the St. Marys Plant (Environmental Protection Act, R.S.O. 1990)	Section 32 exemption - EAA	February 05, 2009	
010-5781	MOE Instrument	Amendment of Vale Inco's Sulphur Dioxide Control Order	Administrative instrument amendments	February 27, 2009	
010-5782	MOE Instrument	Amendment of Xstrata Nickel's Sulphur Dioxide Control Order	Administrative instrument amendments	February 27, 2009	
010-6002	MOE Policy	Technical Bulletin- Environmental Assessment Direction for Municipal Water and Wastewater Projects Proposing an Intra- Basin Transfer	Document provides interim guidance	March 16, 2009	
MOE Sour	MOE Source Protection Terms of Reference				
010-5558	MOE Instrument	Terms of Reference for the Mattagami Region Source Protection Area (Clean Water Act, 2006, S.O. 2006, c. 22)	Not prescribed	January 19, 2009	

EBR Registry Number	Туре	Title	Ministry's Rationale for Information Notice	Date Published
010-5639	MOE Instrument	Terms of Reference for the Crowe Valley Source Protection Area (Clean Water Act, 2006, S.O. 2006, c. 22)	Not prescribed	January 20, 2009
010-5640	MOE Instrument	Terms of Reference for the Lower Trent Source Protection Area (Clean Water Act, 2006, S.O. 2006, c. 22)	Not prescribed	January 20, 2009
010-5641	MOE Instrument	Terms of Reference for the Ganaraska Region Source Protection Area (Clean Water Act, 2006, S.O. 2006, c. 22)	Not prescribed	January 20, 2009
010-5642	MOE Instrument	Terms of Reference for the Otonabee-Peterborough Source Protection Area (Clean Water Act, 2006, S.O. 2006, c. 22)	Not prescribed	January 20, 2009
010-5796	MOE Instrument	Terms of Reference for the Quinte Source Protection Region (Clean Water Act, 2006, S.O. 2006, c. 22)	Not prescribed	February 05, 2009
010-5797	MOE Instrument	Terms of Reference for the Mississippi Valley Source Protection Area (Clean Water Act, 2006, S.O. 2006, c. 22)	Not prescribed	February 05, 2009
010-5798	MOE Instrument	Terms of Reference for the Kawartha-Haliburton Source Protection Area (Clean Water Act, 2006, S.O. 2006, c. 22)	Not prescribed	February 05, 2009
010-5801	MOE Instrument	Terms of Reference for the Sault Ste. Marie Region Source Protection Area (Clean Water Act, 2006, S.O. 2006, c. 22)	Not prescribed	February 05, 2009
010-5913	MOE Instrument	Terms of Reference for the Rideau Valley Source Protection Area (Clean Water Act, 2006, S.O. 2006, c. 22)	Not prescribed	March 16, 2009
Ministry o	Ministry of Government Services			
010-4286	MGS Policy	Paper and Printing Services Acquisition	Administrative decision	August 1, 2008

EBR Registry Number	Туре	Title	Ministry's Rationale for Information Notice	Date Published
Ministry o	f Health and	l Long-term Care		
010-5235	MOHLTC Policy	Release of Ontario Public Health Standards and 26 Protocols	Not policy, provides general notice about the release of standards and protocols	December 10, 2008
Ministry o	f Health Pro	motion		
010-3723	MHP Notice	The Review of Legislation Affecting Trails - Report on Options	Ministry not prescribed	July 21, 2008
010-4103	MHP Notice	Report: Ontario Trails Strategy – Study on Reducing Conflicts Associated with Recreational Use of Off-Road Vehicles.	Ministry not prescribed	July 21, 2008
Ministry o	f Labour			
010-2220	MOL Regulation	Regulation Proposal under the Regulatory Modernization Act, 2007	Act not prescribed	June 18, 2008
Ministry o	f Municipal	Affairs and Housing		
010-3801	MMAH Regulation	Ontario Regulation 174/08	Not prescribed (MZO)	June 11, 2008
010-5618	MMAH Regulation	Ontario Regulation 412/08 (<i>Planning Act, R.S.O. 1990</i>)	O. Reg. 73/94 Sect 15.5 exemption - Minister's Zoning Orders	January 09, 2009
Ministry o	f Natural Re	esources		
010-0445	MNR Policy	The Ministry of Natural Resources announces that it will be developing revisions to the Forest Management Planning Manual and the Forest Information Manual	Not new policy; pre- consultation and a regulation proposal notice will be posted in fall 2008	April 04, 2008
010-3115	MNR Report	State of the Forest Report, 2006	Not new policy; notice of Report	April 18, 2008
010-3470	MNR Policy	Ontario Moose Program Review – Phase 1: Information Package and Questionnaire	Not new policy: early notice of phase one consultation; expect policy proposal in future	May 06, 2008
010-3317	MNR Regulation	Establish the Species at Risk in Ontario (SARO) List in Regulation under the <i>Endangered Species Act</i> , 2007 (ESA 2007) consistent with Section 7 of the Act	Regulation not prescribed	August 21, 2008

EBR Registry Number	Туре	Title	Ministry's Rationale for Information Notice	Date Published
010-3644	MNR Report	Interim Report on Ontario's Biodiversity 2008	Not policy; MNR report	May 20, 2008
010-4560	MNR Regulation	Amend Part 7 of O.Reg. 663/98 (Areas South of the French and Mattawa Rivers where Sunday Gun Hunting is Permitted) under the Fish and Wildlife Conservation Act	Administrative amendments and previous consultation occurred on <i>EBR</i>	September 11, 2008
010-4476	MNR Policy	Identification and Confirmation Procedure for Areas of Natural and Scientific Interest	Not new policy; only change is on confirming boundaries	September 19, 2008
010-4477	MNR Report	Presqu'ile Provincial Park Double- Crested Cormorant Management Reports	Not policy; annual report	November 24, 2008
010-5530	MNR Policy	Review of the Proposed 2009 Insect Pest Management Program – Jack Pine Budworm, Timmins District: Stage One – Information Centre	Section 32 exemption - EAA	January 20, 2009
010-5628	MNR Policy	Review of the Proposed 2009 Insect Pest Management Program – Jack Pine Budworm, Red Lake and Sioux Lookout Districts: Stage One – Information Centre	Section 32 exemption - EAA	January 20, 2009
010-5191	MNR Policy	Presqu'ile Provincial Park Islands Implementation Planning	Section 32 exemption - EAA	January 29, 2009
010-5775	MNR Policy	Updated Procedures for Approval of New Special Policy Areas (SPAs) and Modifications to Existing SPAs under the Provincial Policy Statement, 2005 (PPS, 2005), Policy 3.1.3-Natural Hazards-Special Policy Areas	Administrative changes	February 09, 2009
010-4678	MNR Instrument	Application by PhosCan Chemical Corp. (PhosCan) to MNR for permits for Construction of an all-season road on Crown land approximately 40 km into the Far North Planning Area to improve access for further exploration at its Martison PhosCan exploration site	Section 32 exemption - EAA	February 20, 2009
010-5632	MNR Regulation	Amendment of Ontario Regulation 230/08 (Species at Risk in Ontario List) in response to report received November 19, 2008	Regulation not prescribed	February 20, 2009
010-6066	MNR Regulation	Ontario Fishery Regulation Changes under the <i>Fisheries Act</i> to Fisheries Management Zone 10 and a portion of FMZ 14	Act not prescribed	March 16, 2009

EBR Registry Number	Туре	Title	Ministry's Rationale for Information Notice	Date Published
010-5788	MNR Recovery Strategy	Request for additional scientific information to be considered in the development of recovery strategies for eight species under the <i>Endangered Species Act, 2007</i>	Not policy; seeking public information for recovery strategies	March 18, 2009
010-6162	MNR Regulation	Instrument classification regulation under the <i>EBR</i> – amendment to O. Reg. 681/94 to classify proposals for instruments under the <i>Endangered Species Act</i> , 2007, and the <i>Provincial Parks and Conservation Reserves Act</i> , 2006	Inform the public of proposal	March 26, 2009
010-6219	MNR Regulation	Amend Part 7 of O.Reg. 663/98 (Areas South of the French and Mattawa Rivers where Sunday Gun Hunting is Permitted) under the Fish and Wildlife Conservation Act	Consultation previously carried out under previous Registry process	March 30, 2009
MNR - For	est Manage	ment Plans		
010-4382	MNR Instrument	Forest Management Plan for the Kenogami Forest for the 10-year period April 1, 2011 to March 31, 2021– Invitation to Participate	Not prescribed	August 13, 2008
010-4385	MNR Instrument	Forest Management Plan for the Timiskaming Forest for the 10-year period April 1, 2011 to March 31, 2021 - Invitation to Participate	Not prescribed	August 15, 2008
010-4346	MNR Instrument	Forest Management Plan for the Lac Seul Forest for the 10-year period April 1, 2011 to March 31, 2021 – Invitation to Participate	Not prescribed	August 15, 2008
010-4395	MNR Instrument	Forest Management Plan for the Pic River Forest for the 10-year period April 1, 2011 to March 31, 2021 - Invitation to Participate	Not prescribed	August 15, 2008
010-4986	MNR Instrument	Forest Management Plan for the Martel Forest for the 10-year period April 1, 2011 to March 31, 2021– Invitation to Participate	Not prescribed	October 22, 2008
010-5005	MNR Instrument	Forest Management Plan for the Black Spruce Forest for the 10-year period April 1, 2011 to March 31, 2021– Invitation to Participate	Not prescribed	October 24, 2008
010-5205	MNR Instrument	Forest Management Plan for the Dryden Forest for the 10-year period April 1, 2011 to March 31, 2021 – Invitation to Participate	Not prescribed	November 24, 2008

EBR Registry Number	Туре	Title	Ministry's Rationale for Information Notice	Date Published		
010-5336	MNR Instrument	Forest Management Plan for the Nagagami Forest for the 10-year period April 1, 2011 to March 31, 2021 - Invitation to Participate	Not prescribed	December 03, 2008		
010-5146	MNR Instrument	Forest Management Plan for the Bancroft Minden Forest for the 10-year period April 1, 2011 – March 31, 2021 - Invitation to Participate	Not prescribed	December 15, 2008		
010-5147	MNR Instrument	Forest Management Plan for the Mazinaw Lanark Forest for the 10-year period April 1, 2011 – March 31, 2021 - Invitation to Participate	Not prescribed	December 15, 2008		
010-5448	MNR Instrument	Forest Management Plan for the Ottawa Valley Forest for the 10-year period April 1, 2011 to March 31, 2021 - Invitation to Participate	Not prescribed	December 15, 2008		
010-5467	MNR Instrument	Forest Management Plan for the Pineland Forest for the 10-year period April 1, 2011 to March 31, 2021 – Invitation to Participate	Not prescribed	January 12, 2009		
010-3266	MNR Instrument	Forest Management Plan for the Cochrane Area Forest for the 10- year period April 1, 2010 to March 31, 2020 - Review of the Long Term Management Direction	Not prescribed	March 03, 2009		
010-5155	MNR Instrument	Forest Management Plan - Contingency Plan for the Whiskey Jack Forest 3-year period of April 1, 2009 to March 31, 2012 – Public Inspection of Approved Contingency Plan	Not prescribed	March 18, 2009		
MNR - Wa	ter Manager	ment Plans				
010-4865	MNR Instrument	Water management plan for the Black River – Review of Draft Plan	Not prescribed	November 25, 2008		
010-4902	MNR Instrument	Water management plan for the Namewaminikan River – Review of Scoping Report	Not prescribed	January 07, 2009		
MNR - En	MNR - Endangered Species Act, 2007 Permits					
010-3287	MNR Instrument	Permits under sections 58 and 17 of the <i>Endangered Species Act, 2007</i> proposed to be issued to Pelee Quarries on Pelee Island – decision	Permits not yet prescribed	July 17, 2008		
010-5449	MNR Instrument	Permit under clause 17(2) (c) of the Endangered Species Act, 2007	Permits not yet prescribed	December 18, 2008		

EBR Registry Number	Туре	Title	Ministry's Rationale for Information Notice	Date Published
		(<i>ESA</i> 2007) for Removal of Butternut Trees by Invar (Freshway) Ltd.		
010-5791	MNR Instrument	Permit under clause 17(2)(c) of the Endangered Species Act, 2007 (ESA 2007) for Removal (Transplanting) of Butternut Trees by Balco Developments Limited	Permits not yet prescribed	February 13, 2009
010-6274	MNR Instrument	Permit under clause 17(2)(c) of the Endangered Species Act, 2007 (ESA 2007) for Moving of Wavyrayed Lampmussel	Permits not yet prescribed	March 27, 2009
Ministry o	of Northern I	Development and Mines		
Amendments to Mine Closure Plans				
010-3813	MNDM Instrument	Timmins Micronizing Mill and Foleyet Loadout Facility Closure Plan Amendment	Not prescribed	June 13, 2008
010-4184	MNDM Instrument	Detour Lake Mine Closure Plan Amendment	Not prescribed	July 23, 2008
010-4432	MNDM Instrument	Shebandowan West Advanced Exploration Project Closure Plan Amendment	Not prescribed	August 26, 2008
010-6016	MNDM Instrument	Lac Des Iles Mine Closure Plan Amendment, 2008	Not prescribed	March 02, 2009
Ministry o		astructure and Renewal (in June 20	08, became the Ministry o	of Energy and
010-3140	PIR Policy	Built Boundary for the Growth Plan for the Greater Golden Horseshoe, 2006	Ministry not yet prescribed	April 2, 2008
010-3141	PIR Policy	Proposed Size and Location of Urban Growth Centres in the Greater Golden Horseshoe	Ministry not yet prescribed	April 2, 2008
010-3142	PIR Policy	Planning for Employment in the Greater Golden Horseshoe	Ministry not yet prescribed	May 14, 2008
Ministry of Transportation				
010-3764	MTO Policy	Ontario Transportation Demand Management Municipal Grant Program	Not policy; information on funding program	June 24, 2008
010-2234	Metrolinx Notice	Regional Transportation Plan for the Greater Toronto and Hamilton Area (GTHA) – Green Paper #1: Towards Sustainable Transportation	Metrolinx not prescribed	July 17, 2008

EBR Registry Number	Туре	Title	Ministry's Rationale for Information Notice	Date Published
010-6229	MTO Report	Electric Vehicles Study	Not policy; seeking public input for a study being conducted	March 27, 2009
010-6261	MTO Regulation	Ontario Regulation 449/06 – Pilot Project - Low-Speed Vehicles	Act not prescribed	March 27, 2009

SECTION 3

USE OF EXCEPTION NOTICES

SECTION 3: USE OF EXCEPTION NOTICES

3.1 Use of Exception Notices

In certain situations, the *Environmental Bill of Rights, 1993 (EBR)* relieves prescribed Ontario ministries of their obligation to post environmentally significant proposals on the Environmental Registry for public comment.

There are two main instances in which ministries can post an "exception" notice to inform the public of a decision and explain why it was not posted for public comment. First, ministries are able to post an exception notice under section 29 of the *EBR* when the delay in waiting for public comment would result in danger to public health or safety, harm or serious risk to the environment, or injury or damage to property (the "emergency" exception). Second, ministries can post an environmentally significant proposal as an exception notice under section 30 of the *EBR* when the proposal will be or has already been considered in another public participation process that is substantially equivalent to the requirements of the *EBR* (the "equivalent public participation" exception).

During the 2008/2009 reporting year, two exception notices were posted on the Environmental Registry by the Ministry of the Environment (MOE). In both cases, MOE relied on the "equivalent public participation" exception. The ECO believes that both notices were acceptable uses of the of the exception provisions provided in the *EBR*.

No other ministries used exception notices during the 2008/2009 reporting year.

The ECO is pleased that all ministries reduced their reliance on exception notices during this reporting year as compared to past years.

MOE's Use of the "Equivalent Public Participation" Exception:

In January 2009, MOE posted an exception notice on the Environmental Registry relating to the renewal of a Permit to Take Water (PTTW) issued to DeBeers Canada Limited for the extraction of potable water for its Victor Diamond Mine. MOE stated that a number of environmental assessments have been completed for this project, including assessment under the *Canadian Environmental Assessment Act* (*CEAA*).

The ECO disagreed with MOE's use of exception notices for Victor Diamond Mine instruments in our last Annual Report (2007/2008) because the exception provided in section 32 of the *EBR* related to projects implemented under the provincial *Environmental Assessment Act*. There is no similar *EBR* exception for instruments that relate to projects under the federal *CEAA* process. In addition, previous exception notices involved instruments not specifically considered under the *CEAA* process, and therefore were not subject to public consultation. The ECO believes that the use of an exception notice for the current PTTW renewal is appropriate since the supply of potable water was considered and consulted on under the *CEAA* process.

On March 31, 2009 MOE posted an exception notice on the Environmental Registry related to a one-year extension of a regulation under the *Ontario Water Resources Act (OWRA)* for the protection of Lake Simcoe (Ontario Regulation 60/08). The regulation sets out interim limits on the phosphorus levels entering Lake Simcoe from specific municipal and industrial sources. The regulation initially applied from April 1, 2008, to March 31, 2009, and was intended to protect Lake Simcoe's water quality until the Ontario government could "develop a comprehensive framework to provide for the long-term management of both point sources and non-point sources within the [Lake Simcoe] Basin." The *Lake Simcoe Protection Act, 2008* was passed in December 2008 and MOE posted the draft Lake Simcoe Protection Plan on the Environmental Registry in January 2009.

The draft Lake Simcoe Protection Plan, if approved, requires the province to develop a comprehensive phosphorus reduction strategy within one year of the Plan coming into effect. As stated in the exception notice, "the extension of O. Reg. 60/08 to March 31, 2010 would allow for the development of long-term phosphorus caps for sewage treatment plants and a comprehensive Phosphorus Reduction Strategy." MOE stated that there was a substantially equivalent public participation process because the proposal to extend O.Reg. 60/08 was already considered through the Lake Simcoe Protection Plan proposal posted on the Environmental Registry. The ECO believes that MOE's use of an exception notice for the one-year extension of the Lake Simcoe Protection Regulation under the *OWRA* was acceptable. The ECO encourages MOE to appropriately use the Environmental Registry during the development of the Phosphorus Reduction Strategy.

All Exception Notices Posted During 2008/2009 Reporting Year

<i>EBR</i> Registry Number	Ministry	Title	Туре	Date Published
	MOE Regulation	Extension of Ontario Regulation 60/08 (Lake Simcoe Protection) for 1 year made under the <i>Ontario Water Resources Act</i> and other consequential amendments	Equivalent Public Participation Exception	March 31, 2009
0.0000	MOE Instrument	De Beers Canada Inc (OWRA section 34) - Permit to take water	Equivalent Public Participation Exception	January 6, 2009

SECTION 4

ECO REVIEWS OF SELECT DECISIONS ON ACTS, REGULATIONS, POLICIES, AND INSTRUMENTS

SECTION 4: ECO REVIEWS OF SELECT DECISIONS ON ACTS, REGULATIONS, POLICIES, AND INSTRUMENTS

Review of Posted Decision:

4.1 Small Drinking Water Systems

Decision Information:

Bill 171, Health System Improvements Act

Registry Number: AG06E0001 Comment Period: 60 days Proposal Posted: December 14, 2006 Number of Comments: 0

Decision Posted: March 7, 2008 Received Royal Assent: June 4, 2007 (Schedule

D came into force on December 1, 2008)

Transitional Regulation for Small Drinking Water Systems

Registry Number: RG06E0001 Comment Period: 60 days Proposal Posted: December 14, 2006 Number of Comments: 0

Decision Posted: March 7, 2008 Decision Implemented: See 010-3353

Permanent and Transitional Regulations for Small Drinking Water Systems

Registry Number: 010-3353 Comment Period: 30 days Proposal Posted: April 18, 2008 Number of Comments: 26

Decision Posted: October 7, 2008 Regulations Filed: September 16, 2008 (Came

into force on December 1, 2008)

Regulation Amendments under Safe Drinking Water Act

Registry Number: 010-3218 Comment Period: 30 days Proposal Posted: April 18, 2008 Number of Comments: 6

Decision Posted: October 7, 2008 Regulations Filed: September 16, 2008 (Came

into force on December 1, 2008)

Risk Assessment Directives Guidance Document

Registry Number: 010-4913 Comment Period: 30 days Proposal Posted: October 21, 2008 Number of Comments: 8

Decision Posted: January 20, 2009 Decision Implemented: December 1, 2008

Description

On December 1, 2008 the Ministry of Health and Long Term Care (MOHLTC) assumed responsibility for regulating certain small drinking water systems (SDWS) in the province. The Ministry of the Environment (MOE) was previously responsible for regulating most aspects of these systems. SDWS include mostly rural restaurants, trailer parks, motels, and gas stations that do not receive their water from a municipal source. In 2008 MOHLTC and MOE posted five decisions on the Environmental Registry related to the transfer. The five posted decisions were:

- Bill 171, Health System Improvements Act, 2007 (HSIA);
- Transitional Regulation for SDWS;
- Permanent and Transitional Regulations for SDWS;
- Regulation Amendments under Safe Drinking Water Act, 2002 (SDWA); and
- Risk Assessment Directives Guidance Document.

The five decisions provided the basis for the ministry's new risk-based approach to regulating SDWS. Public health inspectors (employed by public health units) will conduct a site-specific risk assessment on every small drinking water system in the province and based on the assessment will issue a directive. The owner and/or operator must carry out the operational requirements (e.g. water testing, treatment, and training) outlined within the directive. This allows a customized approach to regulate these systems depending on the site specific level of risk to drinking water and public health. SDWS include:

- 1) Large municipal non-residential drinking water systems (e.g. airports and large recreation facilities);
- 2) Small municipal non-residential drinking water systems (e.g. small community centres and libraries):
- 3) Non-municipal seasonal residential drinking water systems (e.g. cottages on communal drinking water systems and trailer parks);
- 4) Large non-municipal non-residential drinking water systems (e.g. large motels and resorts); and
- 5) Small non-municipal non-residential drinking water systems (e.g. restaurants, gas stations, churches, and bed and breakfasts).

The term 'residential' refers to a place where one actually lives such as a house, apartment or mobile home (trailer).

Bill 171: Health System Improvements Act, 2007:

The *HSIA* received Royal Assent in June 2007. The Act amended numerous pieces of legislation including the *Health Protection and Promotion Act (HPPA), Ontario Water Resources Act (OWRA)* and *SDWA*. The government stated that the changes were "intended to strengthen and support various programs and services that are part of Ontario's health care system". Schedule D of the Act contains legislative amendments required to transfer the regulation of SDWS from MOE to MOHLTC.

Permanent and Transitional Regulations for Small Drinking Water Systems:

The 'transitional' regulation, under the *HPPA* carried over standards from MOE's smaller drinking water systems regulation, under the *SDWA*. Until a public health inspector conducts a site specific risk assessment and issues a directive, the 'transitional' standards apply to SDWS. Once the public health inspector issues a directive, the owners and/or operators must comply with the permanent regulation. The regulations came into force on December 1, 2008.

Regulation Amendments under Safe Drinking Water Act:

MOE amended several regulations under the *SDWA* to transfer the responsibility for regulating SDWS to MOHLTC. MOE revoked the 'interim' smaller drinking water systems regulation under the *SDWA* and made administrative amendments to eight other regulations. In addition, the government amended the meat regulation under the *Food Safety and Quality Act, 2001* to replace all references to MOE's small drinking water system regulation with the new SDWS regulations under the *HPPA*. All amendments came into force on December 1, 2008.

Risk Assessment Directives Guidance Document:

The purpose of this document is to provide guidance to boards of health and public health inspectors to develop and issue site specific 'directives' for SDWS. For example, the document lays out recommended frequency of sampling and testing based on the 'category' of risk assigned to that system (i.e. high risk systems require more frequent testing and sampling than low risk systems).

Background:

In May 2000, seven people died and more than 2,300 people became ill when the town of Walkerton's drinking water system was contaminated with *Escherichia coli (E. coli) O157:H7*. At the time, drinking water in Ontario was primarily governed by procedural guidelines and voluntary standards under the Ontario Drinking Water Objectives. Following this tragedy, the provincial government – specifically MOE – began a much needed overhaul of Ontario's responsibilities for protecting drinking water.

Under the previous system, public health units exercised an oversight role to ensure that the quality of water for communal water systems was safe. MOE was the lead oversight agency for municipal water systems. Under the Safe Water Program, public health units maintained a list of all drinking water systems, received reports of adverse drinking water test results and were required to act immediately to protect the health of the public when adverse results were received, such as issue boil water advisories. Only a small amount of time was spent on municipal drinking water systems under this program.

In response to intense public pressure to develop a comprehensive drinking water regulatory framework, the provincial government established a public inquiry led by the Honourable Dennis O'Connor. In 2002, Commissioner O'Connor's findings were released in two volumes (The Report of the Walkerton Inquiry, Part One: The Events of May 2000 and Part Two: A Strategy for Safe Drinking Water). The provincial government committed to implementing all 121 recommendations contained in the Walkerton Inquiry Report and in September 2007, Environment Minister Laurel Broten declared that "all 121 recommendations in the Report of the Walkerton Inquiry have now been implemented."

Commissioner O'Connor recommended that "the provincial government should enact a *SDWA* to deal with matters related to the treatment and distribution of drinking water." In December 2002, the Ontario government responded to this recommendation by passing the *SDWA*, a statutory umbrella to encompass all regulations relating to the treatment and distribution of drinking water. A few key components of the Act include mandatory licensing and accreditation of all laboratories that test drinking water, new standards for drinking-water treatment, distribution, quality and testing, mandatory certification of all operators of municipal drinking-water systems, mandatory licenses for all municipal owners of drinking-water systems, and an Advisory Council on Drinking Water Quality and Testing Standards (Advisory Council) to conduct research on water issues. (For our review of the *SDWA*, see the ECO 2002/2003 Annual Report, pages 80-85.)

In May 2003, the Ontario government passed the Drinking Water Systems Regulation, under the *SDWA* (O. Reg. 170/03). The regulation replaced the Drinking Water Protection Regulation—Larger Water Works (O. Reg. 459/00) and the Drinking Water Protection Regulation—Smaller Water Works Serving Designated Facilities (O. Reg. 505/01), under the *OWRA*. For our review of O. Reg. 170/03, see ECO 2003/2004 Annual Report, pages 85-88. The new regulation defined eight classes of drinking water system including some that were not previously regulated, and established specific water treatment, testing and reporting requirement for each. The eight classes included:

- Large municipal residential;
- Small municipal residential;
- Large municipal non-residential;
- Small municipal non-residential;
- Non-municipal year round residential;
- Non-municipal seasonal residential;
- Large non-municipal non-residential; and
- Small non-municipal non-residential.

In response to small drinking water system owners' complaints that the new regulation was too costly and complex, Environmental Minister Dombrowsky asked the Advisory Council to provide the government with advice on how to regulate small water systems. In February 2005, the Advisory Council presented the 'Report and Advice on Ontario Regulation 170/03, Smaller, Private Systems Review and Recommendations' to the minister. The Advisory Council concluded that "the problems with the Regulation cannot be remedied through specific changes to the current Regulation" and suggested an alternate, risk based approach to regulating SDWS. Four key elements of their recommended approach included:

- "A risk-based, site-specific approach for five of the eight 'categories of system' under O. Reg.
 170/03, which include Large Municipal Non-Residential, Small Municipal Non-Residential, Non-Municipal Seasonal Residential, Large Non-Municipal Non-Residential, and Small Non-Municipal Non-Residential; as well as any designated facilities within these categories;
- The remaining three categories under O. Reg. 170/03, which include: Large Municipal Residential, Small Municipal Residential, and Non-Municipal Year Round Residential, are to continue to be regulated under the current Regulation 170/03;
- Risk-based, site-specific approach to be outcome-based, anchored by compliance with the Ontario Drinking Water Quality Standards; and
- Transfer of responsibility to public health units to administer the safe drinking water programs for all commercial and institutional systems that serve the public."

An Interim Fix:

In June 2005 MOE passed an 'interim' regulation (O. Reg. 252/05) for non-residential and non-municipal seasonal residential drinking water systems while a new regulatory approach was developed. The ministry proposed that the new approach transfer responsibility for these systems to MOHLTC from MOE, through the local public health units. The regulation reduced the requirements related to water quality testing, treatment, and operator certification for many smaller drinking water systems in the province. The approach created a three-tiered system for protecting drinking water supplies:

- O. Reg. 170/03 Most residential drinking water systems and systems that supply water to designated facilities (e.g. hospitals, day cares, and schools);
- O. Reg. 252/05 ('interim' regulation) Non-residential and non-municipal seasonal residential SDWS; and
- Regulation 903 (under OWRA) Private wells.

The ECO reviewed O. Reg. 252/05 in our 2005/2006 Annual Report (pages 107-111) and identified a few concerns. These concerns included inadequate public consultation and that the 'cost-averse framework' provided minimal requirements for testing, treatment and reporting. The ECO also noted that the proposed transfer of responsibility from MOE to the public health units would "likely to pose a capacity challenge to the public health units" and that the success would depend upon providing public health units with "adequate implementation capacity, including inspections staff and inspection protocols, training and technical expertise, and information management systems." The ECO further recommended that "MOH and MOE prescribe under the EBR portions of the [HPPA] pertaining to SDWS, to ensure the appropriate level of transparency and public consultation." The government prescribed sections of the HPPA related to SDWS under the EBR in June 2008.

Implications of the 2008 Decisions

Transfer of Regulatory Responsibility to MOHLTC:

Effective December 1, 2008, the public health units (established under the *HPPA* and overseen by the MOHLTC) are responsible for regulating most SDWS that serve the public and do not receive water from a municipal drinking water system. Prior to December 1, 2008, MOE was responsible for regulating these small systems through an 'interim' regulation, for non-residential and non-municipal seasonal residential drinking water systems. MOE will continue to establish drinking water standards, retain licensing authority over water testing laboratories and will remain responsible for certifying drinking water system operators.

New Risked Based Approach:

As of December 1, public health units will assess every SDWS in the province (not subject to O. Reg. 170/03 or private wells regulation), estimated at more than 18,000 and assign a category of risk (high, moderate, or low). Based on the assessment and risk category, the public health inspector will issue a directive that clearly outlines the system's operational requirements (e.g. water testing, treatment, and training) the owner and operator must follow. In other words, each small drinking water system will

eventually receive their own tailored made rules for operating depending on level of risk to drinking water and public health as determined by the local public health unit.

Since it will take some time for public health inspectors to assess and issue directives for each small drinking water system, MOHLTC created a 'transitional' process to regulate these systems. After December 1, 2008 owners and operators of SDWS must comply with the new 'transitional' regulation – O. Reg. 318/08. The 'transitional' regulation essentially has standards similar to MOE's 'interim' regulation under the *SDWA*. These standards specify minimum requirements on sampling frequency, sampling parameters (*E. coli* and total coliform), drinking water standards (set by Ontario Drinking Water Quality Standards - Ontario Regulation 169/03), treatment and ability to post warning signs to exempt the system from the regulation. After the public health unit issues a directive, the owner and operator must comply with the 'permanent' regulation – O. Reg. 319/08.

Requirements for Public Health Units/ Public Health Inspectors:

The role of public health units has dramatically changed related to regulating SDWS. Under the new program, public health units will:

- Keep an inventory of all SDWS that supply water to users and their owners and operators;
- Conduct an on-site risk assessments of every drinking water system and assign category of risk (high, moderate or low);
- Issue an individual 'directive' for each system, based on the outcome of the risk assessment and issue any 'directive' amendments, as needed;
- After the initial risk assessment, conduct routine risk assessments not less than once every two
 years for high risk systems and not less than once every four years for moderate and low risk
 systems;
- Respond to adverse drinking water quality incidents related to SDWS;
- Enforce non-compliance with the HPPA; and
- Collect and report data on SDWS to MOHLTC as required.

Requirements for Owners/ Operators:

The 'transitional' and 'permanent' regulations have specific requirements that the owners and operators of SDWS must comply with. Under the new program, owners and/or operators must:

- Notify the local medical officer of health before supplying water to users;
- Designate an operator who is primarily responsible for the duties under the regulation (the owner can be the operator):
- Ensure that water provided to users meet all requirements and standards within the regulation;
- Ensure that all sampling, testing, monitoring and reporting requirements are complied with;
- Use a licensed laboratory for testing services or an out of province laboratory approved by MOE;
- Ensure that operators are trained in drinking water system operation and maintenance, as required;
- Take appropriate corrective action when there is an adverse test result or observation (e.g. notify local public health unit); and
- Retain records of all tests required for five years and make them available to the public upon request.

If the owner does not agree with the requirements in a directive issued by the public health inspector, they can request a review by the local medical officer of health. The owner must request a review within seven days of the directive being issued.

Public Participation & EBR Process

MOHLTC provided adequate comment periods through the Registry notices for this legislation, associate regulations, regulation amendments and guidance document. Forty comments were submitted for three

of the Registry postings related to the transfer of SDWS to MOHLTC. Bill 171, *HSIA* and the 'transitional' regulation for SDWS postings did not receive any comments. Generally, comments were supportive of the transfer of responsibility to public health units, made technical recommendations, and asked for clarification on a number of subjects.

The relationship between the six different Environmental Registry postings was confusing at times. As an example, there were two postings related to the 'transitional' regulation (*EBR* Registry Numbers: RG06E0001 and 010-3353) and no description within the postings on how they relate to one another. It appears that the ministry built the 'transitional' regulation proposed in posting of *EBR* Registry Number: RG06E0001 into the 'transitional' and 'permanent' regulations in posting *EBR* Registry Number: 010-3353. The ministry should have included a brief statement within each decision notice linking the two, as the electronic links provided no longer work. Despite the confusing Environmental Registry postings, the ministry did a sufficient job at using the Environmental Registry for public consultation.

Prior to posting the proposals on the Environmental Registry, MOE carried out extensive consultation on how to regulate SDWS including several other Registry postings. Additionally, the Advisory Council held consultation sessions across Ontario in 2004 to provide input on O.Reg. 170/03, as it pertained to SDWS.

A few key issues that were raised by commenters are summarized below.

Transitional' and 'Permanent' Regulations under the Health Protection and Promotion Act:

Local public health units, the Council of Ontario Medical Officers of Health and the Association of Supervisors of Public Health Inspectors of Ontario expressed concern with the proposed 'request to review' process. In the proposed 'permanent' regulation, owners could request their directive be reviewed by a medical officer of health if they did not agree with the contents. Any requests would then be transferred to a medical officer of health in another health unit to review the request and make a decision. The request for review was considered confirmed if the medical officer had not made a decision within seven days. Commenters said that this approach was "problematic" and that the "appeal process is imposing extra work and liability onto another health unit" and some suggested "a central appeal body should be established... e.g. in the form of a technical advisory appeal panel." Commenters recommended that the turnaround time to review a request be extended to 30 days from seven days. The ministry responded to these comments and amended the 'request for review' section of the 'permanent' regulation. A review must now be conducted within a 30-day time period by the medical officer of health of the health unit in which the small drinking water system is located.

Commenters requested that MOHLTC provide additional direction and education material for the public, owners/operators of SDWS and public health units. One commenter stated that the ministry should "undertake appropriate public outreach and community education in order to explain the proposed transfer of responsibility and key elements" of the regulations. In addition, commenters proposed that a "procedural document should be provided to health units indicating examples of standard wording for directives based on specific scenarios." MOHLTC has since provided the public, via their website, with a number of 'fact sheets' on the new requirements for SDWS. The ministry also responded by creating the Risk Assessments Directives Guidance document for public health units. The ministry's decision notice did not reflect these concerns or their actions to address the concerns.

Public health units expressed concern that MOHLTC used incomplete and outdated information to determine the number of SDWS within the province. The ministry uses the calculated number of systems to determine the amount of funding each public health unit will receive to start up this program. Commenters claimed that MOHLTC underestimated the number of systems in the province and therefore is providing inadequate funding to public health units to regulate these systems. The Association of Supervisors of Public Health Inspectors of Ontario urged "the MOE and MOHLTC to re-evaluate the funding formula(s), the number of systems and funding provided to each [public health units] for SDWS." The Canadian Environmental Law Association warned that "it is important to ensure that health units are adequately staffed, sufficiently trained, and properly resourced in order to carry out their important duties and obligations, including overseeing [SDWS] under the HPPA." The ministry's decision notice did not address these concerns.

Commenters were also concerned about links between the small drinking water system program and the source water protection work under the *Clean Water Act*. Public health units requested that "as the SDWS program is developed, consideration should be given to source water protection work... in the assessment of small systems." The Canadian Environmental Law Association pointed out that some SDWS will not be included within source protection planning and "the only likely safeguard for countless consumers of drinking water from small systems will be timely and effective activities by local health staff under the new *HPPA* regulations." The ministry's decision notice did not address these concerns.

Amendments to Safe Drinking Water Act Regulations:

In its decision notice related to the *SDWA* regulation changes, MOE stated that "the majority of the comments were directed to subject matter found in the proposed MOHLTC regulations ... and were considered by MOHLTC in decision-making on those regulations." There were two comments related to the *SDWA* regulation amendments, including the consistency of the use of the term 'Professional Engineer'. The ministry stated that this "was addressed through communication with the author of the submission." One commenter recommended that MOE not retain licensing and regulatory authority over laboratories that carry out drinking water testing and recommended ISO certification by laboratories with MOHLTC providing the regulatory oversight role. The ministry stated that they "will continue to license and periodically inspect laboratories providing drinking water testing services in keeping with Recommendation 42 of Part Two of the Report of the Walkerton Inquiry in order to ensure a consistent approach to licensing and regulation of all drinking water testing laboratories across the province."

Risk Assessment Directives Guidance Document:

In the decision notice, MOHLTC did not provide a summary of comments received through the Environmental Registry posting. However, MOHLTC stated that "feedback received focused primarily on questions of clarification and comments of a technical definitional and drafting natural. Resulting minor amendments were made to the draft guidance document."

SEV

MOHLTC stated that its Statement of Environmental Values (SEV) was considered in making these decisions. For example, the SEV consideration document for the Risk Assessment Directives Guidance document stated that "the transfer upholds environmental values by moving oversight of these systems from an interim regulatory approach under MOE to a risk-based approach under MOHLTC." In addition, the ministry stated that transfer of responsibility "support['s] the government's commitment to ensuring public safety with regard to drinking water."

As of May 2009, the ECO did not receive MOE's SEV document for amendments to the *SDWA* and therefore was unable to review and provide comments.

Other Information

In 2007, MOHLTC undertook a two-year review of its Mandatory Health Programs and Services Guidelines, 1997 as part of the strategy to "rebuild public health capacity within the province". MOHLTC established a technical review committee to oversee the review. MOHLTC posted an information notice on the Environmental Registry advising the public of the committee and that public consultation was underway (*EBR* Registry Number XG07E0001). The ministry replaced the guidelines with the new Ontario Public Health Standards and 28 protocols and loaded a decision notice (*EBR* Registry Number 010-3193) on the Environmental Registry in July 2008. These documents guide public health programs and services, including the small drinking water system program and set minimum standards. Of the 28 protocols, six environmental health protocols were developed:

- Food Safety;
- Drinking Water;
- Recreational Water;
- Beach Management;
- Identification, Investigation and Management of Health Hazards Protocol; and

Risk Assessment and Inspection of Facilities.

The ministry posted three decision notices on the Environmental Registry in March and June 2008 for the following protocols: Protocol Respecting Drinking Water Sampling (*EBR* Registry Number PG04E0004), Drinking Water Haulage Guidelines, Safe Water Program' (*EBR* Registry Number PG04E0006), and Response to Adverse Drinking Water Quality Incidents: Guidance Document (*EBR* Registry Number 010-1668). All three decisions contained the statement that "the ministry has decided to move forward with this proposal and will be including [the documents] as part of the broader review of all protocols and guidance documents being considered under the draft Ontario Public Health Standards." MOHLTC originally posted the Response to Adverse Drinking Water Quality Incidents document on the Registry as an information notice and the ECO urged the ministry to repost as a policy notice.

ECO Comment

The 2000 Walkerton tragedy opened the eyes of Ontarians to the importance of clean and safe drinking water. Since then, the government has transformed Ontario's drinking water program by enacting stricter legislation and regulations such as the *SDWA*, the *Clean Water Act*, and its regulations establishing requirements for source protection planning. However, the new approach became a problem for smaller and private systems as it was considered too costly and complex. Small non-municipal system operators such as rural restaurants and motels simply do not have the financial resources, knowledge or skills to comply with O. Reg. 170/03 compared to operators of large municipal systems. On the other hand, simply exempting them was considered too risky an option. The Advisory Council reported that "serious outbreaks, although rare, can occur in small systems," "that an alternate approach is needed for these types of systems... [and that] drinking water quality standards and level of safety should not be compromised." In response, the MOHLTC and MOE created a new risk based approach to regulating SDWS and transferred this responsibility to public health units. The ECO is pleased with the MOHLTC's new risk based approach that is being implemented by public health units. The approach strikes a good balance between the concerns of system owners and ensuring safe drinking water is provided to the public.

Since 2004, MOE and MOHLTC provided numerous opportunities for the public and owners of SDWS to participate in the development of this program and generally responded to their concerns. By and large, the new risk based approach to regulating these rural drinking water systems is consistent with the recommendations of the Advisory Council and keeping with Commissioner O'Conner's recommendations contained in the Walkerton Inquiry Reports.

In our 2005/2006 Annual Report the ECO recommended that "MOH and MOE prescribe under the *EBR* portions of the *HPPA* pertaining to [SDWS], to ensure the appropriate level of transparency and public consultation." The ECO is pleased that the ministry prescribed sections of the *HPPA* related to small drinking water systems under the *EBR* in June 2008.

Although municipalities and the Ontario government have placed a higher priority on safe drinking water since 2000, poor water quality is still a concern for many communities in Ontario. The Canadian Medical Association Journal reported that there were 679 boil-water advisories issued, including advisories issued for trailer parks in the province of Ontario as of March 31, 2008. Boil-water advisories are issued when treatment fails, high amounts of bacteria or parasites in test samples are found or when an outbreak of illness linked to water consumption occurs. The majority of SDWS will not be included in source protection planning under the *Clean Water Act*. Therefore, it is important that public health inspectors apply the multi-barrier approach encouraged by MOHLTC when assessing and issuing directives. Also, since small systems are no longer regulated under the overarching *SDWA* and MOE, it is imperative that the government continue to provide financial and capacity support to public health units to successfully implement this new program.

Review of Posted Decision:

4.2 Control Order Requiring Collingwood Ethanol to Control Odour and Noise Emissions

Decision Information:

Registry Number: 010-4379 Comment Period: 30 days Proposal Posted: October 6, 2008 Number of Comments: 117

Decision Posted: January 30, 2009 Decision Implemented: January 29, 2009

Geographic Area: Collingwood

Description

Background:

Collingwood Ethanol (CE) manufactures fuel-grade ethanol and other co-products (e.g., livestock and pet food products and dried yeast) from corn using a wet milling process. Since CE began operations in July 2007 and reached full production in June 2008, the Ministry of the Environment (MOE), the Town of Collingwood ("Collingwood") and CE have received hundreds of complaints about odour and noise emissions from the facility. Located within an industrial park in the east end of Collingwood, CE is approximately 210 to 830 metres west of the Blue Shores residential area and 115 metres of another residential area. The industrial park also contains Canadian Mist Distillers Ltd., which produces whiskey and has similar air emissions.

In response to the odour and noise complaints, MOE visited the area on multiple occasions between September 2007 and August 2008. As a result of its findings, MOE laid 17 charges under the *Environmental Protection Act (EPA)* related to alleged odour contraventions and issued two Director's Orders that included a requirement for CE to produce a "Noise and Odour Abatement Plan" by August 31, 2008. MOE advised CE that if contraventions continued after August 31, 2008 MOE would take further action.

On at least ten occasions between September 2008 and January 2009, an MOE Provincial Officer (PO) visited the Blue Shores residential area, sometimes speaking to residents and taking measurements of odour and noise levels. On nine occasions, the PO concluded that odour levels were sufficient to result in adverse effects, particularly loss of enjoyment of property. The PO measured actual odour levels twice, obtaining readings of 55 – 93 odour units (OU). CE's certificate of approval (C of A) for Air establishes an allowable odour level of one OU. On another occasion, the PO measured the noise level in the area, obtaining a reading of 52 decibels A-weighted (dBA) based on a 30-minute average. The PO concluded that this level was sufficient to cause an adverse effect, particularly discomfort and loss of enjoyment of property. This level exceeds MOE's noise level guidelines for urban areas, NPC-205, which range from 45 – 50 dBA depending on the time of day. As a result of these findings, the PO concluded that CE was emitting odour and noise at levels that were in contravention to provincial legislation and "must take action to prevent any continuation or repetition of these contraventions."

Control Order:

On January 29, 2009, MOE issued a Control Order requiring CE to immediately cease contravening section 14(1) of the *EPA* and section 33(a)(b)(c) of O. Reg. 419/05 – Local Air Quality, made under the *EPA*. Odour and noise discharges to the natural environment that cause an adverse effect are illegal under section 14(1) of the *EPA*. In addition, if they cause discomfort to persons, loss of enjoyment of normal use of property or interfere with the normal conduct of business, they are illegal under section 33 of O. Reg. 419/05.

The Control Order requires CE to submit a written report to MOE within 24 hours of receipt of notification from MOE that CE may be a source of a contaminant that is causing an adverse effect. CE must also describe measures that it has taken or will be taking to control the discharges. MOE explained that the Director may require CE to cease operations if it fails to effectively control discharges.

Implications of the Decision

The Control Order requires CE to take immediate abatement measures when notified by MOE. Although it does not require CE to take specific preventive steps to control its discharges, MOE does have the authority to mandate that specific steps be taken. Failure to respond appropriately could result in MOE ordering CE to cease operations temporarily or even permanently – the consequences of which include financial losses due to loss of production, loss of reputation and potentially charges under the *EPA*. However, as long as CE complies fully with the Control Order, MOE will not prosecute the company, although another ministry or a private resident could do a private prosecution.

With this approach to abatement, the onus continues to be on the public to complain to MOE of odour and noise discharges.

Public Participation & EBR Process

MOE provided a 30-day comment period on the draft Control Order that was posted on the Environmental Registry on October 6, 2008. Most of the 117 comments received were submitted by people who had experienced odour or noise discharges, which they attributed to CE, or by employees of CE.

Many of the commenters wanted the facility shut down either temporarily or permanently, explaining that they have been forced to stay indoors to avoid foul odours and/or excessive noise and have suffered headaches, nausea and other health effects. Several commenters noted that property values have declined in the area and property sales are non-existent.

The Collingwood East Environmental Action Committee (CEEAC) requested the temporary closure of CE on the grounds that the area is experiencing "extraordinarily high odour levels and noise" and has been adversely affected for an extended period of time. CEEAC noted that it is reasonable to conclude that CE is the source of contamination and has been unable or tardy in its actions to resolve the problem. CEEAC concluded that closure is required to protect the community from further harm and to compel CE to implement a solution. CEEAC supported its comments with odour readings taken by MOE between June 2008 and September 2008 that ranged from 23 – 170 OUs. Since Canadian Mist was not operational on all of the sampling days, MOE had concluded that CE was at least partially if not wholly responsible for these odour readings. CEEAC also noted that noise measurements taken in August 2008 exceeded levels allowed in CE's C of A.

CE also commented on the draft control order stating that it had already taken "a great many noise and odour abatement actions in most cases under the auspices of Provincial Officer's Orders." CE advised that recent independent odour testing indicated a maximum of 2.05 OUs and advised that further abatement actions should lower the maximum to approximately one OU at the Blue Shores residential area and achieve a compliance rate of 99.75 per cent. CE also advised that it would be submitting a noise abatement plan and implementing additional measures to bring the facility into compliance with MOE's noise guidelines. CE contended that it was shut down when some of the odour complaints were received and was not the source of other odour complaints. CE also contended that the Control Order was redundant and unnecessary since it is in compliance with its legal requirements.

Comments submitted by employees were supportive of CE and the actions that it had taken. They noted that CE employs over 50 people, providing much needed jobs, and that odour issues are the same or better than experienced when a previous company, NACAN Productions Ltd. (NACAN), manufactured industrial and food grade corn and other starches at the facility.

After reviewing the comments, MOE amended the Control Order to clarify the consequences of continuing to cause an adverse effect.

SEV

The ministry's SEV states that it will adopt as a guiding principle an "ecosystem approach to environmental protection and resource management." When the creation of pollutants cannot be avoided, the ministry's priority will be first to prevent their release to the environment and second, to minimize their release.

As a policy, MOE does not prepare SEV considerations on instrument proposals. In an August 1995 discussion paper on the use of its SEV, MOE stated: "issuing, review, repeal or amendment of instruments is guided by policies, Acts or regulations." MOE maintained that since the SEV is considered in the development of these policies, Acts and regulations, considering it again for the granting of instruments is unnecessary. Secondly, in its 1996 Annual Report to the ECO, MOE stated that SEV consideration is not required for instrument proposals because MOE already considered the SEV when it developed its classification regulation for instruments. The ECO disagreed noting that section 11 of the EBR requires ministries to consider their SEVs whenever environmentally significant decisions are being made. Opponents of MOE's decision to approve Lafarge's application to burn municipal waste and used tires in its cement kilns also disagreed with MOE and successfully sought leave to appeal the approval at the Environmental Review Tribunal (ERT). Lafarge unsuccessfully appealed the ERT decision to the Ontario Divisional Court. In a decision in June 2008, the Court ruled that MOE is required to consider its SEV whenever it issues a C of A.

Other Information

Prior to the Blue Shores residential area being developed and CE purchasing the site, NACAN produced various starches onsite for many years. NACAN also had received complaints about odour, and, in response, had purchased extra land to increase the buffer zone between itself and its neighbours. Natural Resources Canada approved the conversion of the NACAN facility to an ethanol production facility, subject to some conditions, after a federal screening level environmental assessment (EA) concluded that "the project is not likely to cause significant adverse environmental effects." The federal EA had indicated that air quality modeling of odour discharges should have a maximum odour level of 0.54 OUs and that noise levels "should be less than typical traffic noise in the area." MOE issued a C of A (Air) on June 21, 2006 to CE signalling that it also believed that odour and noise discharges from the facility would not cause an adverse effect and would comply with the *EPA* and O. Reg. 419/05.

In December 2004, MOE issued a Basic Comprehensive Certificate of Approval (Air) to Canadian Mist Distillers Ltd. That covers all emissions sources at the facility. CEEAC is seeking leave to appeal this decision due to concerns about odour. For additional information on this leave to appeal, please see Section 8 of this Supplement to the Annual Report.

Under section 447.1 of the *Municipal Act, 2001*, a municipality can apply to the Superior Court of Justice to allow it to shut down a facility for up to two years when activities on the property are having a detrimental impact on the neighbourhood. In August 2008, Collingwood announced its intention to have CE declared a public nuisance. The court case will be heard on June 8, 2009. In another case, the Town of Newmarket ("Newmarket") was successful at having Halton Recycling declared a public nuisance in 2006 after receiving over 1,100 complaints about odour over a two-year period. The court found that the effects of the odours from the composting operations of Halton Recycling were widespread, affecting people within a 1,200 – 1,800 metre zone of the facility, and were so unpleasant that they constituted an adverse effect and a public nuisance. Halton Recycling had already spent \$8,000,000 on upgrades and plans, and had requested MOE's approval on additional abatement measures five months before the decision. Despite these actions, the court was dissatisfied with the company's progress and ordered a nine-month shutdown if it failed to implement a remedial action plan to eliminate off-site odours within 90 days. The court also requested MOE to process the required approvals to allow Halton Recycling to implement its remedial action plan within 90 days.

Collingwood is not the only location in Ontario with concerns about ethanol facilities. The City of Barrie enacted an interim by-law in December 2007 that prohibits ethanol facilities in industrial areas. The City

is considering amendments to its Official Plan that would prohibit ethanol production facilities from locating within 1,000 metres of any sensitive land use or any other ethanol production facility. The City may also declare ethanol as a noxious product. Ten years earlier the City of Chatham began to experience odorous discharges from an ethanol facility, now called Greenfield Ethanol. When it opened in 1997, the nearest residential area was 1,000 metres away. A taller stack was installed in 2000 to further disperse the odour-causing compounds and in 2007 GreenField Ethanol announced that it would be installing a new system to further reduce its odorous discharges as a result of an MOE order.

In recent years, MOE has committed resources to strengthening the policy and regulatory framework for odour discharges. In 2005, MOE announced that it would be developing an Odour Policy Framework to help the ministry address odour complaints and help industry select appropriate odour abatement options. Since then MOE has published two position papers, and sought expert and public opinion on various aspects of the framework. MOE's proposal to establish the allowable odour level at one OU was considered by some commenters to be too stringent. They advised that one OU is essentially undetectable except under laboratory conditions. For example, Toronto Water explained that ambient odour levels from sources such as an unmown field or a lake can be ten times higher. MOE has also amended O. Reg. 419/05 to include new odour-based standards for three highly odorous sulphur-based compounds that will be fully in force by 2013. For additional information on these initiatives, refer to our 2007/2008 Annual Report, pages 115-118.

MOE already has specific policies in place for noise. Updated in 1995, separate criteria for noise from stationary sources such as industrial facilities have been established for urban and rural areas. The criteria established maximum noise levels allowed at neighbouring properties, such as residential areas, schools and hospitals, which are enforceable when included in a facility's C of A (Air). For additional information on MOE's noise policies, refer to the Supplement to our 2006/2007 Annual Report, pages 166-168, and pages 241-243.

MOE has several guidelines, last revised in 1995, to assist municipalities with making appropriate land use decisions. In Procedure D-1-1 "Land Use Compatibility: Implementation," MOE explains that municipalities must separate and/or protect industrial facilities and sensitive land uses, such as residential areas. However, since retaining jobs and curbing urban sprawl are also important, industry is encouraged to convert existing industrial facilities and developers to build higher density housing, such as condominiums, often in close proximity. In Procedure D-1-1, MOE explains that, in addition to legislative controls, buffers such as separation distances, berms and vegetation should be used to reduce odour, noise and dust discharges from industry to the "trivial impact level."

In Guideline D-6 "Compatibility between Industrial Facilities and Sensitive Land Uses," MOE classifies industrial facilities according to their potential to cause adverse noise, dust, vibration and odour discharges. In the event that a facility is unable to or fails to comply with legislative requirements for discharges, separation distances can then be relied upon to mitigate the effects of the discharges on neighbours. MOE established three minimum separation distances, which range from 20 metres for a self-contained facility with a low probability of air discharges to 300 metres for a large-scale facility with a high probability of air discharges of "major annoyance." The three minimum separation distances are based on three classes of "potential influence areas." Using case studies and experience, MOE determined that adverse effects may be experienced within the potential influence areas, which range from 70 metres to 1,000 metres respectively.

Under its climate change program, the provincial government passed Ontario Regulation 535/05 – Ethanol in Gasoline, made under the *EPA*. Since January 2007, gasoline sold in Ontario must contain an annual average of five per cent ethanol. According to the provincial government, this target will reduce annual greenhouse gas emissions by about 800,000 tonnes, equivalent to removing 200,000 cars from the road.

ECO Comment

The situation in Collingwood highlights the problems that can arise when planning and environmental controls fail to protect the public and industry. Communities become divided and much time, effort and money are required to resolve the situation. Both the federal and provincial governments approved the conversion of the NACAN facility to an ethanol facility in the belief that air discharges from the facility would not adversely affect its neighbours. The Town also approved the conversion of the facility and the development of the Blue Shores residential area with this same belief - a belief that has subsequently been proven to be incorrect. The issuance of this Control Order more than 18 months after CE began operations confirms MOE's belief that odour and noise discharges have not yet been effectively controlled by regulatory and abatement strategies despite a significant investment in abatement technologies by CE. A similar situation arose in the mid-1990s when MOE began receiving complaints about odorous discharges from two kitchen manufacturers operating in Thornhill. Despite MOE's ongoing involvement, abatement measures failed to curb the discharges. In 2007, one of the manufacturers relocated. However, as recently as the summer of 2008, MOE was still pursuing abatement measures with the other manufacturer. The ECO urges MOE to consider a more aggressive approach to ensuring compliance with odour- and noise-related legislative requirements. The objective of the EPA, which is to ensure that no-one has to endure the adverse effects of discharges over an extended period of time, is undermined when MOE fails to resolve situations in a timely manner. When progress has been slow, Collingwood and other municipalities have become frustrated and are losing faith in MOE's ability to resolve these issues. Municipalities are now taking independent action using other legislative tools, e.g., public nuisance provisions in the Municipal Act, 2001.

The ECO strongly supports the goal of further intensification to protect our remaining natural lands and agricultural lands from development. However, locating industrial and residential and other sensitive land uses in close proximity to each other not only requires careful planning, intensification also requires stringent environmental standards and effective abatement and enforcement measures to ensure that sensitive populations and the natural environment are protected from the effects of industrial discharges. According to MOE's land use compatibility guidelines, buffers such as separation distances should be relied upon to mitigate the effects of occasional exceedences of air quality criteria to a "trivial impact level." However, the separation distances between CE and its residential neighbours have not proven sufficient even though CE has taken steps to curb its discharges (often under the auspices of MOE) and has an independent study to confirm that these steps have been effective. It may be time for MOE to review the content and applicability of its land use compatibility guidelines, particularly its practice of establishing separation distances that are much less than the areas of potential influence.

The ECO notes that MOE has committed significant time and resources related to abatement at this one facility and has used the Environmental Registry to seek public input on proposals related to CE and to publicize its decisions. The public and other interested parties have been able to read the comments on the various proposals, review how MOE has addressed those comments and to track progress supporting the *EBR*'s goal of enhancing transparency and accountability by all parties.

Review of Posted Decision:

4.3 Banning the Use of Cosmetic Pesticides in Ontario

Decision Information:

Registry Number: 010-2248 Comment Period: 30 days Proposal Posted: January 18, 2008 Number of Comments: 6997

Decision Posted: June 27, 2008 Decision Implemented: April 22, 2009

Decision Information:

Registry Number: 010-3348 Comment Period: 34 days
Proposal Posted: April 22, 2008 Number of Comments: 4115
Decision Posted: June 27, 2008 Came into Force: April 22, 2009

Decision Information:

Registry Number: 010-5080 Comment Period: 45 days
Proposal Posted: November 7, 2008 Number of Comments: 3989
Decision Posted: March 4, 2009 Came into Force: April 22, 2009

Description

Background:

On April 22, 2009 – Earth Day – Ontario's ban on the sale and use of pesticides for cosmetic purposes took effect. This brought to conclusion a process that began over 15 months earlier with public consultation on the Ontario government's proposed policy to ban cosmetic pesticide use, followed by additional consultation on specific amendments to the *Pesticides Act* and development of a new regulation to implement the ban.

Under the ban, certain pesticides – including previously widely-used pesticide products such as Roundup (glyphosate acid) and "weed & feed" products, which contain 2,4-D, – may no longer be used to control insect pests (including insect infestations), weeds and fungal diseases on lawns, gardens, patios, driveways, cemeteries, parks and school yards. Pesticides that are banned for cosmetic uses (but not sale) may continue to be used "in and around the home" to protect health and safety, such as: controlling fleas on pets; controlling indoor pests or pests that can cause structural damage (e.g., termites, carpenter ants); controlling mosquitoes (e.g., to prevent the transmission of West Nile Virus); and killing plants that are poisonous to the touch (e.g., poison ivy).

The cosmetic pesticides ban, which was touted as part of the Ontario government's promised toxics reduction strategy, was timed to take legal effect before the 2009 spring growing season started. Ontario's Minister of the Environment stated: "I'm proud to say that, when the ban takes effect on Earth Day, we will have eliminated this unnecessary risk to our environment, our families, and especially our children." However, the ban – heralded as "one of the toughest in the world" – is not without controversy, as evidenced by the many thousands of supporters and opponents from a wide variety of fields and backgrounds who weighed in.

Pesticide bans are nothing new. Many municipalities across Canada have enacted by-laws banning the use of pesticides to varying degrees. The town of Hudson, Québec was the first municipality to pass such a ban. That ban, enacted in 1991, was hotly opposed by landscaping and lawn care companies, and it took years of litigation before the Supreme Court of Canada confirmed, in 2001, the Town's right to impose a pesticide ban. The City of Toronto by-law prohibiting pesticide use faced a similar challenge in the courts, resulting in a 2003 Ontario Court of Appeal decision upholding the City's by-law (leave to appeal to the Supreme Court of Canada was dismissed in 2005).

Unlike the estimated 140 pesticide by-laws enacted in Canadian municipalities (over 25 of which are in Ontario), the provincial ban not only restricts the use of certain pesticides and pesticide ingredients, but also their sale. The new pesticide ban will operate province-wide, and is intended to create "one clear, transparent and understandable set of rules across the province."

In its 2008 Budget, Ontario's Liberal government committed to allocating over \$10 million over four years "in support of the Province's plan to ban the use of non-essential pesticides, which will foster the development and sale of green alternatives that are better for the environment and the health of Ontario families; funding would also be used for education, outreach and compliance."

Why Are Pesticides a Concern?:

Pesticides are designed to kill or control harmful or troublesome living organisms. Pesticides can take the form of chemical substances, biological control organisms, or other forms.

Pesticides play a number of important roles in the world today: to improve quality and yield in agricultural production; to prevent and control insect infestations in a variety of indoor and outdoor settings; to control the spread of diseases (such as West Nile Virus) and toxins that are harmful to humans; to control noxious plants such as poison ivy; and to protect our pets from fleas and ticks to name a few.

Despite its benefits, pesticide use is not without its risks. When pesticides are not stored, handled or applied properly, they can cause significant harm to human health and the environment. Even when applied properly, pesticides and their breakdown products can contaminate soil, water and air (and, ultimately, harm non-targeted flora, fauna and their habitat) through processes such as runoff, leaching, wind and water erosion, and spray drift. When it rains, pesticides are often washed away in runoff into local water bodies. Some pesticides break down more slowly than others, persisting in the environment long after they are applied and, in some cases, accumulate in the body tissues of wildlife, becoming more concentrated as they move up the food chain (a process known as "bioaccumulation").

Recently, pesticide use has been identified as a potential cause of mass declines in pollinator species worldwide. For more information, see Box 1, "Pesticides Linked to Pollinator Decline," below. Glyphosate (the main ingredient in the popular garden pesticide "Roundup") is suspected to be contributing to the growth of harmful algal blooms in Lake Erie.

In 2007, the ECO received an application for investigation expressing concern about herbicide spraying in parts of the Boreal forest. Those applicants alleged that aerial applications of herbicides by forestry companies were contaminating waterways in northern Ontario, jeopardizing environmental health and economic welfare. The applicants claimed to have observed, over a period of years, a loss of flora and fauna in sprayed areas. To read about that application and the Ministry of the Environment (MOE)'s response, see the Supplement to our 2007/2008 Annual Report, page 309.

Box 1

Pesticides Linked to Pollinator Decline

Pollinators – birds, bats and insects that aid in the fertilization of flowering plants by transporting pollen – play a vastly important role in the environment. It has been estimated that three quarters of the world's flowering plant species depend on pollinators. With a significant percentage of humanity's food supply dependent on pollinators, and nearly 100 kinds of food crops worldwide requiring pollination by honeybees alone, the importance of pollinators for global agricultural production is clear.

Pesticides are considered to be one of the main threats to pollinators, along with disease, habitat loss and degradation, monoculture (which is often supported using pesticides) and the introduction of exotic species.

Recent widespread declines in pollinator populations around the world have been cause for significant alarm (but also disputed). Most notable is the mass die-off of commercial colonies of the European

honeybee (*Apis mellifera*) that first appeared around 2006 and has affected colonies in the U.S., Canada, Australia, Brazil, China, Europe and other regions. This mysterious phenomenon has come to be known as Colony Collapse Disorder (CCD). While the cause of CCD has yet to be determined conclusively, many theories on the cause have been advanced, including the use of a relatively new class of crop pesticides called neonicotinoids. Current thinking is that the cause may be a combination of factors (including pesticides) that, together, weaken colonies and make them more susceptible to disease.

This widespread population decline is not limited to commercial honeybees – considerable declines have also been observed in wild populations of pollinators including bees, bats and hummingbirds. In Canada, the rusty-patched bumblebee, once a common species in the southern part of Ontario, has not been seen for several years.

Whether pesticides have caused or contributed to the most recent pollinator declines or not, there can be no doubt that reducing the volume of pesticides in the environment would be beneficial to pollinators. Not only would this reduce the potential threats posed by pesticide chemicals, but pollinators thrive in an environment that includes a variety of food sources; green, weed-free lawns have been likened to "deserts" for bees.

By ending our preoccupation with perfect lawns, and instead planting more hardy native species, allowing wildflowers and other "weeds" to grow along roadsides and in parks, we could reduce our reliance on pesticides while, at the same time, encouraging more resilient and diverse pollinator communities.

The Cosmetic Pesticides Ban Act:

Bill 64, the Cosmetic Pesticides Ban Act, was introduced in the Ontario Legislature in April 2008, and the Ontario government decided to make few changes to the original draft the bill. The final bill received Royal Assent on June 18, 2008.

Bill 64 amended Ontario's *Pesticides Act* to prohibit the use and, in some cases, the sale of certain pesticides that may be used for cosmetic purposes. "Cosmetic" is defined in the Act as "non-essential." The Act does not define "essential" or "non-essential." The Act now also clarifies what constitutes "use" of a pesticide: placement or application of a pesticide, or the mixing, dilution or loading of a pesticide for purposes of placing or applying it.

The most significant amendment to the *Pesticides Act* is the addition of a new section – section 7.1 – that establishes a general prohibition on the use "in, on or over land" of prescribed pesticides. Further, the new section prohibits the sale of certain prescribed pesticides.

Section 7.1 also includes a list of exceptions to the prohibition on use, including uses related to agriculture, forestry and promotion of public health and safety. Golf courses and other prescribed uses are exempt conditionally (i.e., provided prescribed conditions have been met). All exceptions are subject to any requirements prescribed by regulation.

Finally, the new section states that a municipal by-law is inoperative if it addresses the use or sale of a pesticide that may be used for cosmetic purposes.

While the *Pesticides Act* includes a number of enforcement tools that apply to the pesticides ban, including regulatory orders and prosecution, MOE has indicated that, in the context of the cosmetic pesticides ban, it intends to "focus its initial efforts on education when responding to reports of suspected non-compliance."

Pesticides Regulation O. Reg. 63/09:

Once the *Pesticides Act* was amended, a regulation was needed to prescribe banned pesticides so that the ban could take full effect once proclaimed. A new general regulation made under the *Pesticides Act*, O. Reg. 63/09, was filed on March 3, 2009, and came into force with the *Cosmetic Pesticides Ban Act* on April 22, 2009. This regulation replaced the previous general regulation under the Act, Regulation 914 - General, R.R.O. 1990.

Pesticide Classification

The new regulation changed the system for classifying pesticides in Ontario. Where previously there were six schedules of pesticides, there are now eleven classes under the new regulation.

Several new classes were added to give effect to the provisions in the *Pesticides Act* that ban the cosmetic use and sale of pesticides. In particular, Class 8 pesticides are cosmetic pesticides that are banned from sale. Class 9 is comprised of pesticide ingredients that are banned for cosmetic use. Class 7 includes pesticides that have a dual purpose (i.e., cosmetic and non-cosmetic) but that are not permitted to be used for cosmetic purposes. When the legislation came into force, 244 pesticides were banned from sale, 82 pesticide ingredients were banned for cosmetic use, and 106 dual-use pesticide products were banned from cosmetic use.

See Box 2, "Classes of Pesticides," below, for MOE's description of each pesticide class.

Box 2

Classes of Pesticides

Class 1 are manufacturing concentrates used in the manufacture of a pesticide product.

Classes 2, 3 and 4 are commercial or restricted pesticides that can continue to be used by farmers and licensed exterminators for non-banned uses. If the pesticide contains a Class 9 pesticide, it may only be used for an exception to the ban (e.g., agriculture, forestry, golf courses).

Classes 5 and 6 pesticides can be used by homeowners and include biopesticides and lower risk pesticides allowed for cosmetic uses.

Class 7 includes dual-use pesticides (i.e. indoor/outdoor uses). Such pesticides will only be allowed to be used for non-cosmetic purposes. For example, they can be used indoors to kill pests or outdoors for public health or safety reasons, but cannot be used outdoors to kill weeds. Retailers must give information to notify purchasers that only certain uses of these pesticides are legal. In two years' time, consumers will also not have ready access to these products, and continue to receive notification about the legal uses.

Class 8 are banned domestic products. (e.g., pesticide-fertilizer combination products, weed and insect control products for lawns and gardens).

Class 9 lists ingredients in pesticide products. These ingredients are banned for cosmetic use. Commercial or restricted products containing these ingredients may still be used by farmers or licensed exterminators for exceptions under the ban.

Class 10 pesticides are ingredients in pesticide products. These are the only ingredients that may be used to control plants that are poisonous to the touch under the public health or safety exception.

Class 11 lists ingredients that are biopesticides or lower risk pesticides. Licensed exterminators that use Class 11 pesticides are required to post a green notice sign to provide public notice of the use of these pesticides.

(Source: Verbatim from MOE Backgrounder, "Ontario's Cosmetic Pesticides Ban," dated March 4, 2009: http://www.ene.gov.on.ca/en/news/2009/030401mb.php)

Pesticides are to be classified in accordance with the criteria set out in a table included in section 4 of the regulation. Both the regulation and the table refer to the "Pesticide Classification Guideline for Ontario" – a copy of this guidance document is accessible on MOE's website. For more information, see Box 3, "Pesticide Classification Guideline for Ontario," below.

The MOE Director continues to be responsible for making the final decision about classifying (or refusing to classify) pesticides, and has discretion to classify a pesticide other than in accordance with the criteria, if it is in the public interest to do so. However, the regulation requires the Director to "have regard to" any recommendation made by the Ontario Pesticide Advisory Committee (OPAC). Under the old regulation, OPAC made recommendations to the Director about classifying all pesticides; OPAC will now generally make recommendations only related to classification of pesticides in Classes 1-6, although it may recommend another classification if it is in the public interest.

The Director is required to maintain a record of pesticide classifications called the "Compendium of Classified Pesticides," and to make the Compendium available to the public. MOE has established a pesticides database that provides access to the Compendium (http://app.ene.gov.on.ca/pepsis/) – this database was formerly found on OPAC's website. Since the regulation was filed, MOE has already posted classification updates on its website to reflect new pesticide classifications.

Box 3

Pesticide Classification Guideline for Ontario

In its decision notice for the new pesticides regulation (O. Reg. 63/09), MOE included a link to the "Pesticide Classification Guideline for Ontario, version 1.0," dated February 24, 2009 (the "Guideline"). The Guideline is incorporated by reference in the regulation in section 4(5). This finalized, 39-page document is intended to provide a detailed explanation of the system for classifying pesticides set out in O. Reg. 63/09.

The Guideline provides a general overview of the legal framework of Ontario's cosmetic pesticides ban, including definitions of some key terms used in the legislation, and describes the role of Ontario's Pesticide Advisory Committee (OPAC).

The bulk of the Guideline consists of a breakdown of the eleven pesticide classes under the new regime, including information for each class about: the characteristics of pesticides in that class; the federal designation of pesticides in that class; the hazard and use criteria for that class; and, in some cases, other information particular to that pesticide class and an example to illustrate how classification works. The Guideline also explains the provisions in the regulation relating to the application process for having a pesticide classified in Ontario, the Director's discretion to refuse to classify a pesticide, and reclassification and declassification of a pesticide.

Most significantly, the Guideline includes as appendices two flowcharts setting out the decision-making processes for classifying pesticides: the first for OPAC to make recommendations on pesticide classifications for classes 1 - 6; and the second for the Director to classify pesticides.

The ministry did not post a separate notice on the Environmental Registry for the Guideline, nor did it provide the public with any opportunity to comment on a draft version of the Guideline. In its regulation decision notice, the ministry indicated that the Guideline was created in response to some stakeholders' requests for predictable and transparent science criteria to be used for classifications and prohibitions of domestic and cosmetic pesticides. MOE indicated that "this approach served to meet the request for more transparent and clear classification criteria to encourage innovation while still preserving the MOE's ability to update and amend the pesticide classification guidance document as necessary."

Exemptions from the Prohibition on Use for Cosmetic Purposes

The new regulation defines "agriculture," "forestry," "golf courses" and "promotion of public health and safety" for purposes of the exemptions found in the *Pesticides Act*.

The regulation sets out the conditions required for golf courses to be exempt, including requirements to:

- be accredited by an integrated pest management body by April 22, 2012 or the second anniversary of the first day that pesticides are used at the course;
- prepare an Annual Report, to be made available to the public, detailing information about pesticides used at the golf course during the reporting year; and
- hold a public meeting annually to make the Annual Report available for inspection.

The regulation also sets out conditions required to engage the health or safety exemption for purposes of poisonous plants, buildings and structures, and public works.

Additionally, a number of other exempted uses not listed in the *Pesticides Act* are prescribed in O. Reg. 63/09, including:

- specialty turf (i.e., for lawn bowling, cricket, lawn tennis or croquet);
- arboriculture (i.e., protection of trees);
- sports fields to be used for purposes of a national or international sporting event;
- structural exterminations;
- scientific purposes;
- compliance with requirements of other provincial or federal legislation (e.g., Ontario's Weed Control Act); and
- the management, protection, establishment or restoration of natural resources.

Conditions are prescribed for purposes of each of the aforementioned exemptions.

Requirements for Sale of Cosmetic Pesticides

O. Reg. 63/09 sets new restrictions on the sale of cosmetic pesticides. In particular, any person who sells a Class 7 pesticide is required to provide purchasers with ministry-approved information regarding the use of Class 7 pesticides. One way is to supply purchasers with the Class 7 Handout form prepared by MOE (see Figure 1, below). This is intended to inform purchasers about the restrictions on the cosmetic use of those products.



Figure 1. Class 7 Handout (English). Source: Reproduced from MOE, http://www.ene.gov.on.ca/en/land/pesticides/class7.php.

Interestingly, vendors and retailers are not required to provide similar information when selling other classes of pesticides, which, if they contain a Class 9 ingredient, also may not be used for cosmetic purposes unless an exemption applies. As stated in the Pesticide Classification Guideline in relation to Class 6 pesticides – which include pesticides that may be purchased by homeowners for cosmetic use – "Class 6 pesticides that have ingredients listed in Class 9 may only be used in, on or over land for the uses set out in sections 17 to 33 of the Regulation [i.e., exemptions]." As an example, several Class 5 and 6 pesticides contain pyrethrins, which are Class 9 ingredients and are therefore banned for cosmetic use.

The regulation also imposes a requirement on vendors of Class 1,2,3,4 or 7 pesticides to restrict public access to the pesticide by displaying it "in a manner that prevents any person other than the licenced vendor or the licenced vendor's employees from having ready access to the pesticide." This provision

does not take effect until April 22, 2011, to give vendors time to change their displays (i.e., create physical barriers) to comply with this requirement.

Notice Signs:

The regulation sets out signage requirements to alert the public when certain pesticides are in use. When a licenced professional uses lower-risk pesticides or biopesticides (i.e., Class 11), a green-coloured sign must be used to give public notice that those pesticides have been applied.

Other Changes

Many of the new aspects of the regulation relate to the implementation of the cosmetic pesticides ban; however, some additional amendments were also made. For example, the new regulation includes changes to pesticide storage and fire department notification requirements. These requirements have now been extended to apply not only to operators and vendors, but to pesticide manufacturers as well. MOE specifically stated that these changes were "in response to a recent fire in a facility that packages pesticides." In this reporting year, the ECO received numerous *Environmental Bill of Rights*, 1993 (EBR) applications related to that July 2007 fire at the Biederman Packaging facility in Dundas, Ontario, including a request for amendments that triggered the changes to the provisions in this regulation. For more information about those applications, see Section 5 of this Supplement.

When O. Reg. 63/09 was filed, MOE posted a large amount of information on its website to explain the changes to the Act and the new regulation, including a number of fact sheets to help various industries, retailers and landowners understand their obligations.

EBR Classification:

On April 22, 2009 (the day the *Cosmetic Pesticides Ban Act* and O. Reg. 63/09 came into force), MOE filed a regulation amending the Instrument Classification Regulation, O. Reg. 681/94, made under the *EBR*. The amendments revoke the previous list of *Pesticides Act* instruments prescribed under the *EBR*, and replace them with new instruments under O. Reg. 63/09. Instruments that are classified include: proposals to classify a pesticide that contains an active ingredient that is not already classified under the regulation or contained in a pesticide classified under the regulation; proposals to reclassify or declassify pesticides under O. Reg. 63/94; and "a proposal by MNR to enter into an agreement with a body responsible for managing a natural resources management project," if it involves use of a pesticide prescribed under section 7.1(1) of the *Pesticides Act*.

MOE did not post a regulation proposal notice on the Environmental Registry or consult the public on this instrument classification, as required by the *EBR*.

Implications of the Decision

The Ontario government's decision to prohibit the non-essential use of pesticides will undoubtedly reduce the volume of pesticides – biologically active chemicals – deposited in the natural environment. Prohibiting the sale (in addition to use) of certain pesticides will further help to ensure that those pesticides are kept out of use. While there was always a prohibition in the *Pesticides Act* on pesticide use that would impair the quality of the environment, harm plant or animal life, or adversely affect health, the new rules go significantly further.

Over time, reducing pesticide use should improve biodiversity, increase ecosystem resilience and promote the resurgence of natural controls on pests. As many pesticides are non-selective (i.e., they do not just kill target organisms), they destroy natural control agents such as beneficial insects and render the environment dependent on chemical pesticides. Reducing pesticides will also result in a landscape with more biodiversity, creating habitat and food sources for many species.

The corollary, of course, is that the pesticide ban will likely result, at least at first, in more weeds and pest infestations in lawns and gardens on both private and public property. Those people who have sensitivities to pollen may be more affected. Farmers may have to work harder to protect their crops, as residences and parks surrounding farmland, which can no longer use pesticides for cosmetic purposes,

may harbour certain weeds, insects and other pests. However, an increase in the availability and use of greener alternatives to the banned pesticides should, with time, help to mitigate the situation.

Indeed, the Ontario government indicated its hope that the cosmetic pesticide ban "is going to drive new green products in the economy." In conjunction with the ban coming into force, the government announced that "to support Ontario's emerging green economy, the Agricultural Adaptation Council will use a provincial investment of \$480,000 to establish the Cosmetic Use Pesticides Research and Innovation Program. The program will encourage the development of lower-risk pesticides and other green alternatives." A more labour-intensive green lawn care industry may also lead to increased employment rates in that sector. While the lawn care sector may face significant changes, the government's support for green product development together with the experiences of other jurisdictions suggest that there is promise in the long-term for that sector to adapt successfully to the new regime.

However, in the short-term, the ban may have significant effects on the viability of many lawn care businesses (i.e., pesticide applicators), effectively sunsetting components of an industry. Many of these companies – which have for years provided a specialized service applying pesticides that are now banned – will likely be unable to adapt their businesses to the new regulatory reality, particularly given the rapid transition for implementing the ban.

The numerous exceptions in the Act and the regulation mean that otherwise banned pesticides will continue to be used – and deposited in the environment – in many situations. However, some of the most significant exceptions relate to circumstances in which pesticides are already regulated, which should help to ensure that pesticides are used responsibly, in accordance with the labels, and in a manner that is protective of sensitive terrestrial and aquatic habitats. For example, while forestry is exempt from the ban, herbicide spraying in Crown forests (where the majority of forestry in Ontario takes place) must be conducted pursuant to the provisions of a Forest Management Plan for a forestry company's Sustainable Forest Licence. Herbicide spray projects are reviewed and approved by MNR under the Crown Forest Sustainability Act. A pesticide permit issued by MOE under the Pesticides Act is also required for all aerial pesticide applications in Ontario Crown forests. Similarly, farmers must have a Grower Pesticide Safety Course certificate in order to purchase or use Class 2 or 3 pesticides, which are considered the most hazardous. The Ontario Pesticide Education Program reports that over 22,000 Ontario farmers are trained in pesticide application and safety through this course. While this certification is not required for farmers to use banned cosmetic pesticides, agricultural users are more likely to be experienced in proper pesticide handling and use than the average Ontarian. Other exemptions (golf courses, arboriculture, natural resources, etc.) only apply provided stringent conditions are met, which should help to minimize the potential impacts of the pesticide use.

The short transition period between the law taking effect on April 22, 2009 and the publication of the final regulation in the Ontario Gazette proved to be problematic for retailers and manufacturers. While the government provided ample warning of its intention for the law to take effect in spring 2009, the full details of the ban were not confirmed until O. Reg. 63/09 was filed on March 3, 2009. In particular, the lists of pesticides in some classes changed significantly from those originally proposed in November 2008. Some pesticides that were proposed as Class 7 pesticides were ultimately classified as Class 8 pesticides (i.e., banned from sale) under the final regulation. Manufacturers and retailers only had seven weeks – until April 22, 2009 – to ensure that Class 8 products were taken off the shelves and to ensure that the required information would be distributed to all purchasers of Class 7 products. Further, the short transition period meant that manufacturers, distributors and retailers, who may have possessed significant quantities of Class 8 pesticides in their warehouses and stores, had to find a way to dispose of any unsold products, creating a potential waste problem for the Municipal Hazardous or Special Waste (MHSW) program. Unsold Class 8 pesticides that can not be shipped for out-of-province use may end up in the hazardous waste stream without stewards or dedicated resources to deal with their disposal.

The MOE Director's broad discretion to deviate from the prescribed pesticide classification criteria will also create uncertainty for the industrial sector. With costs reportedly in the hundreds of thousands of dollars to get a product registered in Canada (a prerequisite to applying for classification in Ontario), this lack of predictability about classification in Ontario, as well as the absence of a right to appeal the

Director's decision on a classification, may discourage companies from doing business in Ontario and stifle the development of new products.

By rendering municipal pesticide by-laws inoperative, the legislation prevents individual Ontario municipalities from enacting even tougher pesticide rules within their boundaries. This means that an opportunity to reduce the deposit of pesticides in the environment even further is lost. However, this uniform approach to regulating pesticides province-wide will create clarity and certainty, particularly for retailers and commercial pesticides applicators that operate across the province.

The law is complex; there will likely be some confusion in the early days as homeowners, retailers and others grapple with the new rules. Class 7 pesticides will present a challenge, as consumers are only permitted to use these products for limited purposes. Other classes of pesticides containing Class 9 ingredients may be inadvertently used for cosmetic purposes, as no information about the restrictions on use will be provided to purchasers of those products.

Undoubtedly there will also be those who have stockpiled Class 8 pesticides prior to the ban coming into force, who will acquire banned pesticides in other jurisdictions, or who will use Class 7 pesticides and pesticides containing class 9 ingredients for cosmetic purposes despite the ban. While MOE's education programs will help, other forms of enforcement will also be required to deal with those people who deliberately and repeatedly flaunt the new law. Peer pressure will also likely play a role in discouraging non-compliance.

Public Participation & EBR Process

MOE undertook consultation on the cosmetic pesticides ban in three stages, using three separate Environmental Registry proposal notices: consultation on the proposed policy underlying the ban; consultation on the proposed *Cosmetic Pesticides Ban Act*; and consultation on a new general pesticides regulation under the *Pesticides Act* to implement the ban.

Policy Proposal

In January 2008, MOE posted a policy proposal notice on the Environmental Registry (*EBR* Registry Number 010-2248) that signalled the government's intention to pass legislation that would ban the cosmetic use of pesticides in Ontario. The proposal notice, which provided a 30-day comment period, requested feedback from the public on a number of policy options, including: the scope of the ban; banning the sale (not just the use) of cosmetic pesticides; proposed exemptions and restrictions; a proposed exemption for golf courses; and timing to introduce and phase-in the legislation.

In addition to seeking comments via the Environmental Registry, MOE reported that it held 26 meetings with a broad range of stakeholders across environment, health, agricultural, golf, turf (including sports & recreation), retail, manufacturing and production, and municipal sectors.

MOE received a staggering 6,997 comments from the public in response to the policy proposal notice. MOE noted in its decision notice (posted in June 2008) that "Due to a system problem, additional comments were submitted via the on-line comment form after the comment period had ended. These comments were ultimately considered as if they had been received during the comment period."

Act Proposal:

In April 2008, MOE posted an Act proposal notice (*EBR* Registry Number 010-3348) to advise the public that Bill 64, the *Cosmetic Pesticides Ban Act*, had been introduced in the Ontario Legislature. MOE noted that all comments received in response to the earlier policy proposal were being considered as part of the decision-making process. Along with a copy of the draft legislation, MOE included lists of proposed active ingredients and domestic products that may potentially be used for cosmetic purposes that MOE was considering to prohibit for either use or sale, "in order to generate discussion about the development of a final list of prescribed pesticides" for the proposed use and sale prohibitions.

MOE provided a 34-day comment period for the Act proposal, and received 4,115 comments during that time. MOE posted decision notices for both the policy proposal and the Act proposal in June 2008, shortly after the bill received Royal Assent.

Regulation Proposal:

In November 2008, MOE posted a regulation proposal notice on the Environmental Registry for a 45-day comment period (*EBR* Registry Number 010-5080). The notice included a link to the draft regulation that MOE proposed to implement the cosmetic pesticides ban, which would replace Regulation 914 (then the key regulation) made under the *Pesticides Act*. The notice also included links to the *Pesticides Act*, lists of pesticides proposed to be included under the 11 proposed pesticide classes, and copies of notices and warning signs that would be required under the proposed regulation.

MOE received 3,989 comments on the proposed regulation, and posted its regulation decision notice on March 4, 2009.

MOE reported that it held three stakeholder information sessions in Toronto during the regulation consultation period "to introduce the proposed regulation and to answer technical and sector-specific questions." More than 130 representatives from environmental organizations, manufacturers, retailers, the lawn-care industry, the golf industry, municipalities, and utilities operators reportedly attended the information sessions. MOE also indicated that representatives from a number of provincial ministries (e.g. OMAFRA, MNR, MMAH, MTO) were invited to attend the information sessions.

Public Comments:

Commenters on the policy, Act and/or regulation proposals included: members of the general public; municipalities; public health units; environmental non-governmental organizations (ENGOs); health associations; conservation authorities; the pesticide manufacturing and reformulating industry; the landscaping industry; retail associations and businesses; horticultural societies, nurseries and botanical gardens; golf course associations; cemetery associations; the energy and forestry industries; and others.

Supporters and opponents of the ban were equally passionate in their convictions. Many individuals, ENGOs, health associations and others lauded the ban as protective of human health and the environment. Many other commenters – often from the manufacturing and landscape industries – argued that the proposed ban was not grounded in science, and that it "fail[ed] to meet international regulatory standards without a rigorous scientifically -based risk assessment model." In particular, commenters questioned MOE's rationale for proposing to ban 2,4-Dichlorophenoxyacetic acid (2,4-D), a widely-used pesticide to control broad-leafed weeds, given Health Canada's Pest Management Regulatory Agency (PMRA)'s decision in May 2008 that 2,4-D presents "no unacceptable risks" and is safe when used according to label directions, following a re-evaluation study of 2,4-D.

Many commenters (particularly municipalities themselves, but also individual commenters, ENGOs, health associations, and others) were opposed to the proposal to make municipal pesticide by-laws inoperative, as it would prevent municipalities from choosing to enact more stringent requirements than those imposed by the province. Other commenters, including the energy, retail, landscaping and manufacturing industries, were supportive of this proposal, as it would avoid dealing with the "patchwork of municipal by-laws" in Ontario and provide equal standards for professional use and retail sales to homeowners across the province.

On an administrative level, many stakeholders including landscapers, retailers and manufacturers expressed concern about the timing for implementation of the pesticides ban. Industry commenters predicted that a spring 2009 implementation would result in serious economic implications for industry. Retailers were concerned about the absence of a transition period for retailers to restrict public access to Class 7 pesticides. Some commenters also argued that there was inadequate time to comment on the regulation proposal notice.

Other comments, some recurring, about the proposed ban and its implementation included:

- Opposition to the original policy proposal that the ban would not apply in rural settings;
- Support for banning the sale (and not just use) of pesticides as it lends to more effective enforcement;
- Suggestion to restrict cosmetic pesticide use to licensed exterminators/applicators only, rather than a blanket ban;
- Concern that the ban will put lawn care providers (pesticide applicators) out of business, particularly as there are no alternative products currently available to treat lawns for insect infestations:
- Requests for a more clear definition of what constitutes "cosmetic" use of a pesticide;
- Requests for exemptions from the ban for activities including: home fruit and vegetable gardens; small trees; insect infestations (particularly grub and cinch bug); municipal parks, rail and utility corridors; energy infrastructure; cemeteries; and public health;
- Requests that exemptions not be given for certain activities, and/or eventual phase-outs for those uses, including: forestry (including herbicide spraying in the boreal forest); golf courses; andinfestations:
- Many suggestions related to classification and/or treatment of specific pesticides;
- The need for robust classification criteria, and a process to appeal classification decisions by the Director
- Concerns about the transition periods for the ban to come into effect, including concerns about retailers' ability to comply with the proposed timeline to restrict public access to Class 7 pesticides;
- Concerns about the scope of the public health and safety exemptions;
- Concerns that a ban on the use of pesticides on surrounding rural lawns and gardens will lead to the increase of pest infestations in farmers' fields;
- Concerns about increased instances of asthma and allergies due to the anticipated proliferation of weeds:
- Concerns about the impact of the ban on property values:
- Concerns about the economic impact of the ban on industry;
- Suggestion that vendors be required to keep records of each Class 7 sale in order to detect potential abuse of the legislation; and
- Concerns about unlawful use of banned pesticides, and the need for enforcement (not just education and outreach).

Ministry Consideration of Public Comments:

At all three stages of consultation, MOE appears to have reviewed the comments received and been willing to reconsider certain aspects of its proposals in light of those comments.

For example, following the consultation period on the policy proposal, MOE reconsidered its proposal to restrict the application of the ban to urban settings. Further, although MOE initially suggested a three-year phase in period for the ban, following the policy consultation period MOE heeded the call of many commenters for an immediate phase-in, and indicated that the ban would instead take effect as early as spring 2009.

MOE made few changes to the draft legislation following consultation on Bill 64, but those changes that it did make responded to the public's concern about the potential for unconditional exemptions for "other prescribed uses" by providing that such exemptions be made subject to conditions.

The ministry made numerous amendments before finalizing the pesticides regulation, as a result of public consultation, including: developing the Pesticide Classification Guideline to accompany the regulation; providing a two-year phase-in period for retailers to make Class 7 products inaccessible to shoppers; changes to proof required for farmers to have access to pesticides for agricultural uses; clarification of the exceptions for public health or safety, natural resources and trees; and changes to transition periods for various aspects of the legislation.

Before finalizing the regulation, MOE also made significant changes to the lists of pesticides under each pesticide class. For example, several pesticides that were proposed to be designated as Class 7 pesticides (restricted sale) were instead listed as Class 8 (banned pesticides) in the final classification documents. It is unclear whether some or all of those changes were made as a result of public comments, or due to further assessment of the pesticides pursuant to the Pesticides Classification Guideline, although MOE did refer to the change to the list of products in each class in its regulation decision notice.

Although MOE clearly considered the public's comments at all stages of consultation, not all of the public's requests were addressed with changes to the legislation. Despite a resounding call for a more clear definition of the term "cosmetic," MOE chose not to amend the proposed definition found in the original draft legislation. While a significant number of commenters, such as individuals and ENGOs, opposed the exemptions for forestry and agriculture and the conditional exemption for golf courses, MOE refused to extend the ban to include those uses. Similarly, the ministry was not persuaded by the golf industry to weaken the annual reporting and meeting requirements for golf courses that take advantage of the exception from the ban. Finally, MOE maintained the proposed spring 2009 start for the ban despite calls by retailers and the commercial lawn care and landscape sector for a longer phase-in period for the prohibitions.

SEV

In its SEV consideration documents, MOE stated that it adopted an ecosystem approach to the pesticide ban. MOE noted that "consideration was given not only to reducing unnecessary risk to human health, but to the health of other non-target living organisms, runoff to surface waters and potential contributions to local and regional air quality." MOE stated that the ban represents "a prudent measure to help protect natural ecosystem function from being adversely affected by unnecessary pesticide use." In its SEV consideration document for the regulation, MOE noted that the cumulative effects and interactions of various pesticides are not known.

MOE asserted that, consistent with its SEV, the new regulation, which implements the *Cosmetic Pesticides Ban Act*, would enhance environmental protection, and that the exceptions in the Act and regulation "are designed to allow for pesticides use with respect to the conservation of important natural resources."

Finally, MOE noted that "the goal of the province-wide ban is to establish one clear, comprehensive law across Ontario" and that the new regulation had "significantly enhanced public transparency and public engagement with respect to certain pesticide uses," such as public works, golf courses, specialty turfs, and natural resources management.

Other Information

As of May 2009, only one other Canadian jurisdiction – Québec – has instituted a province-wide cosmetic pesticides ban. However, since Ontario's ban came into force, Prince Edward Island and New Brunswick had indicated that they too are considering province-wide bans for cosmetic pesticide use.

Québec's *Pesticides Management Code* came into force in April 2003 and, like Ontario's law, restricts the use and sale of a number of pesticides and pesticide ingredients including the widely-used lawn herbicide 2,4-D. The Code is based on the precautionary principle.

In August 2008, Dow AgroSciences LLC ("Dow") signalled its intention to challenge the legality of Quebec's ban on 2,4-D, which is manufactured by Dow. In March 2009, Dow formalized its notice of arbitration. The challenge is being brought under Chapter 11 of the North American Free Trade Agreement (NAFTA). Dow is arguing that the ban is not based on scientific criteria, and that the ban should be lifted given PMRA's decision in May 2008 that "2,4-D meets Canada's strict health and safety standards, and as such can continue to be sold and used in Canada." Dow is seeking compensation for

its lost profits resulting from the ban, as well as additional damages. The Government of Canada has indicated that it will work with Québec to vigourously defend Québec's ban.

This NAFTA challenge is just the latest of many lawsuits brought by corporations to prevent governments from passing laws aimed at limiting public exposure to harmful substances. The challenge is being followed closely by governments, ENGOs and others, as its outcome could have a significant impact on the ability and willingness of Canada and its provinces to protect public health and the environment.

ECO Comment

Pesticides are biologically active substances specifically designed to kill target organisms, that can also impact non-target organisms. Reducing the volume of pesticides being deposited in the environment is a worthy goal, and curbing unnecessary pesticide use is a logical place to start. This provincial legislation will ensure that cosmetic pesticide use is restricted across the province, not just in select municipalities.

MOE did a commendable job on public consultation for this initiative. Its use of the Environmental Registry to give notice and consult on all three levels of development (policy, statute and regulation), along with information sessions, provided ample opportunity for members of the public and specific stakeholders to express their views. The ministry considered public comments and explained the changes made to several aspects of the pesticides ban to address issues that were raised. MOE has also done a good job providing information on its website to help a wide range of pesticide users understand the new rules and their specific obligations. However, MOE should have posted the Pesticides Classification Guideline for Ontario as a separate policy proposal on the Environmental Registry for full public consultation, and MOE should have consulted the public on the classification of Pesticides Act instruments under the EBR. Failure to do so has denied the public its right to notice and comment under the EBR.

The cosmetic pesticides ban has been aggressively criticized for not being "based on science." Indeed, the legislation appears to be more cautious than responsive to specific scientific information. Such an approach is legitimate; science is never definitive and should not alone drive environmental laws and policies. It is an acceptable policy choice to decide, as MOE did here, that any risk presented by the use of pesticides – even a suspected or uncertain risk, or one deemed "acceptable" by federal regulators – should be avoided, particularly in cases where that risk is unnecessary. However, MOE should have been more transparent about the basis for its decision.

Box 4

Making Risk-Based Environmental Decisions

The decision of the government to ban the cosmetic use of pesticides has been controversial, partly due to confusion about the risk-based decision mechanism used as a rationale. Stakeholders on both sides of the issue have pointed to MOE's Statement of Environmental Values (SEV) to support their argument.

Many opponents of the legislation charge that the ministry is committed in its SEV to making decisions that are "science-based" and they did not do so in this case. They argue that it is inappropriate to ban at least some of these pesticides because Health Canada and the World Health Organization have assessed them using a broadly accepted scientific approach and deemed them to have acceptably low ecological and health risks. Low is not zero, but from a scientific point of view there are always uncertainties and unknowns associated with any conclusion. It satisfies science to be confident that the uncertainty is within accepted limits.

Some supporters of the legislation cite the requirement in the SEV to take a "precautionary approach" to decision-making as justification for the ban. The precautionary approach requires that where there is a threat of serious or irreversible damage the lack of full scientific certainty shall not be used to postpone cost-effective measures to prevent environmental degradation. There is significant dispute about the seriousness of the risk presented by cosmetic pesticide use, and the degree of scientific certainty about

that risk. This dispute is irresolvable; if the science is certain, the magnitude of the risk is known, and vice versa. In any event, the ministry did not declare the precautionary principle to be the basis of this policy decision.

In this case it appears that the policy-makers accepted that the risks associated with such pesticide use were low by scientific standards but then questioned if even very low risks are justified when the benefits to the practice are "cosmetic" (where that term has the connotation of being superficial, inconsequential or even trivial). They ask why society would accept any risk for no benefit and conclude that we shouldn't. Thus, a new decision-making tool has been added to the environmental policy tool kit; perhaps it could be labeled the "No Risk for No Benefit" approach.

While the ECO would like to see efforts at pesticide reduction in all contexts, the exemptions set out in the Act and regulation are generally reasonable. The ECO hopes that MOE will be very judicious, however, about prescribing any further exemptions. Although the ECO questions the conditional exemptions for golf courses, specialty turf and international sporting events (which are inconsistent with the other types of exemptions), the ECO accepts that these grounds require high performance standards that would be challenging (although not impossible) to meet without the use of pesticides. The ECO is satisfied that the conditions imposed on golf courses are protective, encourage transparency and public scrutiny, and will encourage reductions in pesticide use over time. The ECO urges MOE to consider a schedule for the eventual phase-out of pesticides for exempted uses, as green alternatives and approaches to pest management become more mainstream.

As it appears possible that Class 2,3,4,5 and 6 pesticides may contain Class 9 ingredients (and, if so, are banned for cosmetic use), MOE should amend the regulation to require information – similar to that distributed for Class 7 products – to be provided to purchasers of any applicable Class 2 – 6 products so that they are aware of the prohibited uses. MOE's description of Class 9 pesticides in the regulation proposal notice, as well as some information on MOE's website, lacks clarity on this point. For example, an MOE backgrounder indicates that "Classes 5 and 6 pesticides can be used by homeowners and include biopesticides and lower risk pesticides allowed for cosmetic uses," but the classification requirements and Guideline clearly indicate that a class 5 or 6 pesticide (presumably those with no cosmetic uses on their labels) may include banned Class 9 ingredients. MOE needs to clarify this.

The ECO is also concerned about the uncertainty built into the pesticide classification system, although the Pesticide Classification Guideline has helped to make that process more transparent. To encourage innovation and development of new, greener products, and to protect the economic vitality of Ontario, businesses need the pesticide classification process to be predictable. While a measure of discretion is important for the Director to avoid by-the-book classifications that are not in the public interest, the government will need to work closely with industry to help relieve this uncertainty. A process for appealing a Director's decision could add a measure of certainty.

The cosmetic pesticides ban represents a shift in philosophy for the province. MOE should have considered the economic impact of this shift on pesticide applicators, and how this specialized group could be supported in the short term. Historically the province has assisted with the transitioning of industries whose viability is substantially undermined by regulatory changes.

The short transition period for manufacturers and retailers to review the final pesticide classifications lists and to deal with Class 8 pesticides is problematic as it has created a potential waste problem. Although the alternative (i.e., to allow Class 8 pesticides, which only have cosmetic uses, to continue to be deposited in the environment) is not ideal, a longer transition period for these pesticides may have been a better option, given the relatively low risk involved. The ECO encourages the province to direct some of the \$10 million earmarked to support the ban to assist municipalities and others to deal with this problem, if necessary.

Finally, MOE's approach to initial enforcement by emphasizing education instead of prosecution is reasonable, as that will provide time for all players to get up to speed on the rules and implications of the ban. The ECO encourages MOE to make every effort to ensure the public is aware of the new rules,

perhaps through public service announcements, local information sessions or other methods. However, for the legislation to ultimately achieve its purpose, MOE will need to step up enforcement after a reasonable transition period, and ensure that it sets aside adequate resources to continue enforcement on an ongoing basis.

The ECO will continue to monitor this issue and report on the ministry's progress in implementing and enforcing the cosmetic pesticides ban in the future.

Review of Posted Decision:

4.4 Canada-Ontario Decision-Making Framework for Assessment of Great Lakes Contaminated Sediment

Decision Information:

Registry Number: PA06E0007 Comment Period: 60 days Proposal Posted: November 21, 2006 Number of Comments: 1

Decision Posted: May 2, 2008 Decision Implemented: March/May 2008

Background:

In May 2008, the Ministry of the Environment (MOE) posted its decision to adopt the *Canada-Ontario Decision-Making Framework for Assessment of Great Lakes Contaminated Sediment* ("COA Framework"). The COA Framework, developed jointly by MOE and Environment Canada (EC) arises from a commitment made in the *2002 Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem* (COA) to develop a risk-based, decision-making framework to address the historic contamination and degradation of sediments in the Great Lakes.

COA:

COA is an agreement between the federal government and the province of Ontario that sets out their respective commitments and responsibilities for restoring and improving the Great Lakes Basin ecosystem. One key priority under COA is the rehabilitation and de-listing of 15 Canadian Areas of Concern (AOCs) identified in the agreement. These areas suffer from pronounced environmental degradation or impairment of their aquatic beneficial uses. The AOC Annex of COA sets out tasks and responsibilities of each government to address this longstanding concern. The ministry and EC determined that a consistent and harmonized approach to assessing contaminated sediments in AOCs was needed where management strategies are required under COA. Subsequently, under Result 4, "Management Strategies for Contaminated Sediment" of the 2002 COA AOC Annex, both Canada and Ontario committed to developing a "risk-based decision-making framework" for the assessment of contaminated sediments.

Ecological Concerns of Contaminated Sediments:

Contaminated sediment is one critical factor contributing to degraded environmental conditions and impairment of beneficial uses of many AOCs. The contaminants originate from industrial, municipal and non-point sources. They enter the Great Lakes via rivers, streams, pipes, discharge outlets and atmospheric depositions, and accumulate in bottom sediments.

The Great Lakes are particularly susceptible to contaminants. The Great Lakes Basin hosts high levels of residential and industrial development, which involve activities that are a significant source of contaminants. Furthermore, the Great Lakes have long water retention times (i.e., the time span for water to move through the system) such that contaminants for the most part do not leave the lakes. Contaminants that are not naturally volatized or broken down in the water become buried in bottom sediments. However, these sediments can be stirred up by disturbances such as storms, biological activity, dredging, ships and boats and wave action.

Contaminants can impair water quality and impact benthic (bottom-dwelling) organisms and the predators that consume them. Although some lake contaminants readily break down, others are persistent and can accumulate in greater concentrations in the fatty tissues of organisms, and concentrate up the food chain in a process called biomagnification. For instance, mercury, a persistent contaminant found in the sediment of many waterbodies, is known to have harmful effects on fish and fish-eating birds that ingest mercury-contaminated food. Scientists are also concerned that prolonged exposure to small doses of mercury can impact a human's neurological, nervous, cardiovascular, renal and immune systems. Every year MOE publishes the *Guide to Eating Ontario Sport Fish* to provide the public with consumption advice based on the levels of bio-accumulative contaminants present in various species of fish found in different locations within the province.

Remediating AOCs and other contaminated waterbodies is a complex process fraught with difficult decisions. Generally, decision-makers debate matters such as the extent to which an area is contaminated, what remediation options should be applied and when sediment can be deemed to be clean. Such debates contribute to costly delays in remediation.

To improve decision-making, experts assert that remediation should be driven by the magnitude of health risks to humans and wildlife from exposure to the contaminated environment. The appropriate remediation approach should consider whether the removal of contaminated sediment would cause greater harm than leaving it in place. In certain instances, techniques such as dredging can result in greater risk for exposure by re-suspending or re-distributing contaminants in the water column or not removing all the deeper contaminated sediments. It is also important to determine the primary source of the contaminated sediments. These inquiries are best answered using sound scientific and risk assessments. However, different tests can produce varying results, and non-scientific factors such as funding and political willingness can also influence the remediation process. The provincial and federal governments recognized that a stronger decision-making framework would assist in establishing a comprehensive, consistent and transparent assessment process.

Historical Overview:

In 1988, the International Joint Commission (IJC), a bilateral organization that monitors transboundary environmental agreements, held a review of AOCs and sediment contamination. After the review, the Commission approved the *IJC Policy Statement on Its Approach to the Revised Great Lakes Water Quality Agreement*. Among the issues the Commission highlighted as requiring additional emphasis was the assessment of progress in the management of contaminated sediments, and the application of ecosystem approaches.

In 1995, the IJC directed the establishment of the Sediment Priority Action Committee (SedPAC). One aim for the group was to identify obstacles to resolving contaminated sediment, which was identified as a major cause of environmental problems and a key factor in the impairment of beneficial uses of the Great Lakes. Obstacles were identified and grouped into the following six categories: limited funding and resources; regulatory complexity; lack of a decision-making framework; limited corporate involvement; insufficient research and technology development; and limited public and local support.

After the 1988 IJC review, both Environment Canada and MOE commenced work on a sediment guidance document. MOE produced two guidance documents: *Guidelines for the Protection and Management of Aquatic Sediment Quality in Ontario* (1993) ("1993 Guideline"); and *An Integrated Approach to the Evaluation and Management of Contaminated Sediments* (1996) ("1996 Guideline").

1993 Guideline:

The ministry's 1993 Guideline involved comparing chemical concentrations in sediment to provincial Sediment Quality Guidelines (SQGs) and natural background levels. The SQGs set safe levels for metals, nutrients and organic compounds. The guidelines set out three levels of effect:

 No Effect Level (NEL): contamination does not affect fish or benthic organisms. No biomagnification is expected. Sediment is considered clean and no management decisions are required.

- The Lowest Effect Level (LEL): contamination can be tolerated by the majority of benthic organisms. The sediment is clean to marginally polluted. Contamination that exceeds the LEL may require further assessment and a management plan.
- The Severe Effect Level (SEL): Sediment is considered heavily polluted and detrimental to the
 majority of benthic organisms. Where contamination exceeds the SEL then testing is required to
 determine if sediment is acutely toxic. A management plan may be required.

The 1993 Guideline recognized the importance of biological-effects based guidelines for the evaluation of sediments to determine the appropriate remedial action. The 1993 Guideline considered the health of sediment-dwelling organisms to assess the potential for biomagnification up the food chain when determining whether remedial action was required. The NEL is based on the related Provincial Water Quality Objectives and the LEL and SEL are based on co-occurrence of chemical and biological information. The application of the 1993 Guideline is province-wide and not limited to the AOCs. The ministry is planning to review the SQGs and the protocol used to derive them.

1996 Guideline:

The 1996 Guideline built upon the 1993 Guideline and provided guidance on key considerations for sediment remediation if management action is required. When an assessment indicates that contaminated sediments are a risk, a decision-maker must determine the appropriate remediation management strategy. The 1996 Guideline outlines the factors that should be considered when setting clean-up goals and strategies, as well as federal and provincial legislation that should be examined prior to embarking on a remediation project. The risk management strategy includes the scientific considerations from the risk assessment, and the non-scientific factors such as societal and economic limitations that decision-makers must also examine when developing an action plan. In many instances, it is the non-scientific factors that are the greater obstacles to implementing a remedial plan when, for example, adequate funding cannot be secured to undertake expensive treatment of contaminated sediment.

Federal Approaches:

Subsequent to the 1988 IJC review, Environment Canada initiated a program to develop biological sediment guidelines using sediment toxicity tests and benthic community structure. Completed in 1998, the assessment process - BEnthic Assessment of SedimenT (BEAST) - used benthic organisms because they are the most exposed and potentially the most sensitive to contaminants within sediment. The spatial extent and the severity of the contamination is determined using the type and number of species present and their biological response (survival, growth, reproduction) in standard laboratory tests. The data is then compared to the biological guidelines developed for both field populations and laboratory responses of benthic organisms.

Creating a Framework:

In 1998, MOE and EC were jointly involved in a sediment assessment and remediation project in the Cornwall area. During the course of the project, EC and MOE staff noticed that contaminated sediments were assessed differently by the public and private sector, which resulted in inconsistencies in clean-up decisions. This lack of consistency triggered EC and MOE to commit to developing a harmonized assessment framework.

Ontario and Canada held several workshops in 1998 to discuss the development of an ecologically based sediment decision-making framework and subsequently assembled a team of scientific experts. In 2002, a COA Sediment Task Group was formed to complete the framework. In November 2007, MOE posted the draft COA Framework on the Environmental Registry for comment.

2008 Contaminated Sediment Guideline:

MOE's newly developed *Guidelines for Identifying, Assessing and Managing Contaminated Sediments in Ontario: An Integrated Approach*, May 2008 ("2008 MOE Guideline") integrates the COA Framework along with the 1993 and 1996 Guidelines into one contaminated sediment guidance document. It is intended to present all the information on handling contaminated sediments in Ontario in a clear and transparent package. The document is organized into three sections: the identification, the assessment

and the management of contaminated sediments. The COA Framework sets out the scientific assessment for the 2008 MOE Guideline. If the scientific assessment determines that management options are required, then the 2008 MOE Guideline outlines the risk management considerations including social and economic issues, based on the 1996 Guidelines. The 2008 MOE Guideline states that prior to any remedial action, permits and approvals may be required under different legislation.

Description

The Canada-Ontario Decision-Making Framework for Assessment of Great Lakes Contaminated Sediment (the "COA Framework") is an integrated sediment guidance document for identifying, assessing and managing contaminated sediment. It harmonizes the federal and provincial approaches on sediment assessment and builds upon the 1993 and 1996 provincial guidelines. The COA Framework uses an ecosystem approach to assess sediments and considers potential effects on sediment-dwelling and aquatic organisms, including the potential for contaminants to bioaccumulate up the food chain.

The COA Framework is intended to standardize the decision-making process across different assessment sites while maintaining enough flexibility for site specific considerations. Developed for use in the Great Lakes, the COA Framework states it can also be used to assess contaminated sediments in other waterbodies across the province. It is expected that governmental and non-governmental decision-makers, scientists, program managers, consultants and Remedial Action Plan steering committees will rely on this document to conduct assessments of various contaminated sites.

The COA Framework recognizes that contaminated sediment issues are much broader than those identified in the early 1970s. The COA Framework is explicitly based on ecological risk assessment principles, which is a process that evaluates the probability of adverse ecological effects occurring as a result of exposure to contaminants. The process consists of four steps: hazard identification; doseresponse assessment; exposure assessment; and risk characterization. The COA Framework examines environmental concerns associated with contaminated sediment, including human health concerns associated with biomagnification.

The COA Framework describes itself as a rule-based, weight-of-evidence approach for assessing contaminated sediment on a site-by-site basis. The analysis used in the decision-making process incorporates data from four "lines of evidence" (LOE): sediment chemistry (i.e., sediment quality guidelines), sediment toxicity, benthos community alteration and the contaminant's biomagnification potential.

Since chemistry alone cannot predict biological effects, the COA Framework uses sediment chemistry as an initial screening tool for determining if further 'effects based' assessments are required. It also relies on biological endpoints including sediment bioassays, benthic community evaluation and biomagnification potential, which are the main focus of the analyses of the assessment of sediments for dredging, cleanup or monitoring.

The COA Framework addresses human health concerns associated with biomagnification pathways. Where there are human health concerns associated with exposure to contaminated sediment by other pathways (i.e., dermal contact from swimming or flooding, or exposure to harmful contaminants that do not biomagnify) then the COA Framework recommends that a human health risk assessment be undertaken to assess the possible risks to humans.

The COA Framework provides a detailed flowchart of sequential steps to be undertaken in the assessment of contaminated sediments, and the associated outcomes of each step that may result in additional assessments or a final determination. Each section of the flowchart is accompanied by detailed explanations of the rationale behind each procedure and decision. Where the flowchart indicates that sediments require additional assessment, the results from the four LOE are entered into a Weight of Evidence matrix to determine the appropriate remedial actions or the necessity for additional, more detailed assessments.

The COA Framework also sets out the following four "guidance rules" that should be relied on when applying the decision-making process:

- Sediment chemistry data (e.g., sediment quality guidelines) will not be used alone when making remediation decisions unless contaminants are present at extremely elevated concentrations, or the sites are subjected to regulatory action;
- Remediation decisions will be based on biology, not chemistry;
- LOE data (i.e., tests, models) that contradict the results of properly conducted field surveys are deemed to be incorrect; and
- If remedial action will cause more environmental harm than leaving the contaminants in place then remediation should not be applied.

The COA Framework commences by examining sediment chemistry. When contaminants are present in concentrations below the Sediment Quality Guidelines (i.e., a set of numerical guidelines for the protection of sediment-dwelling organisms), and the sediment contains no contaminants capable of biomagnifying, then no further assessment or remediation is required. Also excluded from further assessment are sediments with contaminant concentrations equal to or below local background concentrations (even if the contaminant concentrations are above the SQGs or have the potential to biomagnify). This is to ensure remediation efforts are directed towards anthropogenic (human) contamination and not natural enrichment.

Where the preliminary assessment of sediments indicates the possibility for contaminants to be toxic or to biomagnify (and present in levels above local background concentrations), the COA Framework requires that the remaining LOE be examined. A contaminant's biomagnification potential is initially addressed by conservative (worst case) modelling by examining sediments and benthos organisms and their predators, which is then followed by additional food chain data and more realistic assumptions. Where the evidence shows there is no potential for contaminant biomagnification through the aquatic food chain then no further assessment or remediation is required. Sediments are also screened for toxicity (acute and chronic); whether sediments are toxic to individual organisms and the extent of the toxicity. Lastly, alterations to local benthic communities are addressed by laboratory studies and field observations and include an analysis of whether the benthic community is significantly different from appropriate local benthic reference sites.

After the initial assessments are completed, the COA Framework directs users to develop a Weight of Evidence decision matrix based on the results from the above-mentioned LOE assessment (i.e., results of the chemistry, toxicity, benthic alteration and biomagnification analyses). The matrix may produce one of three possible outcomes: 1) the contaminated sediments pose an environmental risk; 2) the contaminated sediments may pose an environmental risk but further assessment is required; or 3) the contaminated sediments pose a negligible environmental risk. With the Weight of Evidence approach, data from the analysis of the benthic community are given greater weight than the sediment chemistry data.

Where the matrix indicates further assessment is required before reaching a conclusive decision, the COA Framework stresses that the study team should be comprised of scientists with strong expertise in sediment chemistry, sediment toxicity testing, benthic community assessment, food chain effects and environmental statistics for design, implementation and interpretation of investigative studies. The rationale behind further assessments is to determine whether sediment contaminants are the actual cause of the biological effects before remediation can be recommended.

The assessments described above focus on surficial sediments. The COA Framework states there is also a need to determine whether deeper sediments (below 10 centimetres in depth) may be uncovered by natural or human-related circumstances. The assessment for deeper sediments is similar to the process outlined for surficial sediments.

Implications of the Decision

The COA Framework now empowers decision-makers to evaluate how to proceed when sediments are considered clean, what levels of contamination are acceptable in the short-term and when contamination is severe enough to warrant significant remedial action. These are key decisions that must be made in determining whether a site needs to be remediated.

The COA Framework is intended to assist in the assessment and restoration of AOCs because contaminated sediment is a significant cause of deterioration of these aquatic ecosystems. Establishing a decision-making framework that can be widely applied is a difficult process in light of the fact that contaminants associated with sediments may split into dissolved and particulate portions which may be more or less bioavailable to organisms. The science and approach used in the assessment of contaminated sediment has evolved significantly over the years. The COA Framework aims to capture these changes.

Scientific experts in the field recognized that exceeding a sediment quality guideline meant little in regards to determining sediment toxicity. Relying solely on chemical data does not provide evidence of a contaminant's bioavailability and risk for harm. Furthermore, exclusively looking at a bioassay may overestimate the poor quality of sediments, and only studying benthic community data may obfuscate naturally occurring contaminants or alterations in organism communities. Therefore, experts advocated for an integrated approach to assess contaminated sediment.

The COA Framework will facilitate the assessment of contaminated sediments across the province by providing a consistent, transparent and more advanced ecologically-based approach to sediment assessment. Using an Ecological Risk Assessment, the COA Framework standardizes the decision-making process while recognizing site-specific conditions and the input of professional judgment. The Weight of Evidence table helps ensure consistency and transparency by deriving appropriate actions from the table, in which the results from the four LOE are inserted into the matrix in order to determine the next steps. This allows stakeholders to follow a decision-making process. Furthermore, MOE will rely on the sound science and transparent process to issue provincial clean-up orders and ensure that they are upheld in any legal challenge.

Remediating an AOC or a contaminated water body would have widespread ecological, economic and social implications for the affected area. Such benefits include improved wildlife and fish habitat, better water quality and recreational activities, increased local property values, and the creation of economic opportunities in the community.

One key element when dealing with contaminated sediments is the large amount of resources required to assess and remediate a site. The COA Framework intends to help ensure resources are properly allocated where they are needed most. The COA Framework uses sediment chemistry to identify sediments that are seriously contaminated or those that are not a risk, and therefore do not require additional assessment. In-depth analysis only occurs where data suggests a risk may exist and will proceed until a definite answer can be ascertained.

The COA Framework on its own does not address crucial non-scientific decisions that need to be made when addressing contaminated sediment, for example the social and economic considerations. These matters are addressed in the Risk Management section of the 2008 MOE Guideline.

In addition, by incorporating the COA Framework into the 2008 MOE Guideline, the COA Framework's decision-making assessment process is officially applicable to the assessment of contaminated sediments across the province. For example, the 2008 MOE Guideline is being used in the following assessments outside of the Great Lakes: the Trent River; Lion's Creek; Beaver-Dam Creek; St. Clair River; and Turkey Creek among others.

MOE is relying on the 2008 MOE Guideline for all its assessments and remediation projects. Where consultants, for example, use a different approach than the 2008 MOE Guideline, MOE will request that

they provide all the information required in the 2008 MOE Guideline. If any information is missing, MOE will request that the consultant obtain any outstanding information.

Public Participation & EBR Process

The draft COA Framework proposal was posted on the Environmental Registry for 60 days commencing November 21, 2006. MOE also circulated a letter to key Great Lakes industries and industrial associations, environmental organizations, and Remedial Action Plan implementation groups in order to notify them of the posting, and offered to hold consultation meetings. The ministry received one comment from the Sarnia-Lambton Environmental Association (an industry association), which expressed its support for the proposal.

In developing the COA Framework, the federal and provincial governments conducted an "extensive peer-review process, both nationally and internationally." The COA Framework was reviewed by: Environment Canada; several provincial environmental ministries; national and international scientific experts; the Canadian Council of Ministers of the Environment Water Quality Task Group; and the COA Annex Implementation Committee. The COA Framework was also published in scientific peer-reviewed literature and presented at the 31st Annual Aquatic Toxicity Workshop and the International Joint Commission 2005 Great Lakes Conference and Biennial Meeting.

SEV

MOE stated that the COA Framework complied with the principles of: environmental protection; ecosystem approach; and resource conservation as outlined in its Statement of Environmental Values (SEV).

In regards to the principle of environmental protection, the ministry stated that the COA aims to ensure a "healthy, prosperous and sustainable Great Lakes Basin Ecosystem for present and future generations." MOE stated that the COA Framework meets this goal by ensuring a clearer direction for the assessment and management of contaminated sediment in the Great Lakes Basin.

Furthermore, MOE explained that the COA Framework uses an ecosystem assessment approach by considering the risks of contaminated sediments on the environment and human health through their toxicity and their ability to biomagnify. With respect to resource conservation, MOE stated that the clear procedures of the COA Framework will help to conserve the Great Lakes and safeguard the people living in its basin.

Other Information

MOE has other guidelines related to sediments in waterbodies.

The "Fill Quality Guidelines for Lakefilling in Ontario" aim to protect the quality of the sediment and water in areas adjacent to lakefilling activities. The guidelines set out the quality of fill which may be used in lakefill projects.

The "Handbook for Dredging and Dredged Material" provides an overview of the management options for the handling of dredged material in Ontario. These guidelines were developed to protect the receiving environment in relation to the physical, chemical and biological quality of the material being dredged, and apply to all forms of dredging. The dredged sediments are classified into two groups – contaminated or uncontaminated – according to numerical guidelines. Once the sediments have been evaluated, a disposal method is selected based on the degree of contamination.

The COA Framework and the 2008 MOE Guideline also mention the Brownfields Records of Site Condition Regulation (O. Reg 153/04), which came into force in October 2004, and its associated Soil, Ground Water and Sediment Standards. Both the Regulation and Standards are undergoing amendments. The Standards set out the applicable site condition standards for prescribed contaminants

that must be met in order to obtain a Record of Site Condition for a property under the *Environmental Protection Act*. Contaminated sediment is defined as soil of a maximum depth of 0.15 metres located at the base of a waterbody. The sediment standards in the Regulation are based on MOE's 1993 Sediment Guidelines. These values are considered to provide a level of human health and ecosystem protection consistent with background and protective of sensitive ecosystems.

The Regulation and Standards also use an ecological risk assessment process. Where there is evidence that a site may be contaminated from industrial activities then a Qualified Person *may* require sediment sampling as part of a Phase 2 Environmental Site Assessment. If sediments are sampled then they must meet the Regulation's standards. A risk assessment is required where a standard is exceeded and is to include an assessment of both human health and ecological risks. For more information on the Brownfields Record of Site Condition Regulation and its process, please refer to page 111 of the ECO's 2007/2008 Annual Report.

ECO Comment

Since the late 1990s, the ECO has been reporting on the numerous environmental concerns facing the Great Lakes, and tracking developments arising from the COA agreements. In our past reports, the ECO expressed dismay with the slow rate of progress on restoring the AOCs, the limited funding allotted to meet commitments, the limited community engagement and the lack of transparency and accountability associated with meeting the agreement's goals, in particular the de-listing of AOCs.

The ECO is pleased that Ontario has met its 2002 COA commitment to develop an integrated and harmonized contaminated sediment assessment and decision-making framework. The ECO is hopeful that the new guidelines will lead to an improved and more effective assessment process that will assist in the identification and remediation of polluted waterbodies in Ontario. The ECO also supports the release of the 2008 MOE Guideline, which updates, integrates and makes more transparent the guidelines related to contaminated sediment.

The ECO commends MOE for its COA Framework that improves the scientific assessment process for contaminated sediments on a province-wide scale, and for the extensive public consultation that contributed to its development. A decision-making framework that is flexible enough to be applied to different types of waterbodies and uses an ecological risk assessment will facilitate more transparent and consistent decision-making on contaminated waterbodies across the province. Study findings and risks can therefore be readily compared and evaluated.

The ECO notes that the COA Framework recognizes the evolving science and discourse on managing contaminated sediments. We support the use of the ecological risk assessment to address the potential ecological impacts from contaminated sediments on sediment-dwelling organisms and predators along the food chain. It is important for scientists and decision-makers to understand the ecological impairments resulting from contaminated sediments because it informs the extent and scope of remedial and rehabilitative actions that may be required. In order to stay current, the ECO urges MOE to regularly review the COA Framework and the 2008 MOE Guideline to ensure that scientific advancements are integrated into these documents.

Ultimately, the effectiveness of the COA Framework will depend on factors beyond the scope of the COA Framework including government leadership, the integrated 2008 MOE Guideline actually being used, and adequate funding to carry out the assessments and associated remediation. Complementary provincial efforts are also required to curb the sources of contaminants that make their way into the Great Lakes ecosystem.

One commonly cited impediment to restoring AOCs and other contaminated waterbodies is the cost of remediation. Neither funding nor project leadership are referenced in the COA Framework, but are acknowledged as important in the 2008 MOE Guideline. Removing, treating and disposing of contaminated sediment is extremely costly. The cleanup of one AOC can cost tens of millions of dollars and take several years to complete. For instance, in August 2007, Ontario pledged \$30 million to clean

up Randle Reef in Hamilton Harbour, which was matched by the federal government, and it is expected that municipal and industrial partners will cover the remainder of the \$90 million project. Nevertheless, it is also important to appreciate that the benefits of remediating the Great Lakes are at least equivalent to the costs.

Another impediment to remediating AOCs is tackling the sources of contaminants contributing to the degradation of the affected area. Ideally this should happen before the remediation proceeds. If the sources of contaminants are not ultimately controlled and reduced then there is concern that millions of dollars and years of remediation efforts could be wasted. This could discourage future remediation projects.

Monitoring is also required to ensure any management actions are effective. Although monitoring is not included in the COA Framework, it is mentioned in the 2008 MOE Guideline. The post-remediation monitoring on projects will foster a better understanding of the ecological significance of sediment contamination, and document whether a restored habitat continues to improve or is at risk of becoming degraded again.

The ECO will continue to follow developments on Great Lakes protection and the renewal of the COA in 2010 to monitor whether the remediation of AOCs remains a priority for Ontario, and whether adequate goals and commitments are made to achieve that priority.

Review of Posted Decision:

4.5 Lake Simcoe Protection Act, 2008

Description

Aside from the Great Lakes, Lake Simcoe is southern Ontario's largest inland lake. Since European colonization began in the early 19th century, the Lake Simcoe watershed has experienced a decline in water quality. Increases in phosphorus and decreases in dissolved oxygen led to the collapse of Lake Simcoe's cold water fisheries from the 1960s through the 1980s. Phase I of the Lake Simcoe Environment Management Strategy (LSEMS), a multi-stakeholder environmental initiative, was launched in 1990 with the aim of reducing phosphorus loadings into the watershed. Despite the success of this initiative, it was determined that long-term efforts are needed to protect and restore the watershed, especially in light of ongoing development pressures, population growth and the effects of climate change.

In March 2008, the Ministry of the Environment (MOE) began consultations on a discussion paper, Protecting Lake Simcoe: Creating Ontario's Strategy for Action. MOE's strategy to protect Lake Simcoe included the creation of legislation and a watershed protection plan. The ministry also created two advisory committees to aid in the development of the strategy: a Science Advisory Committee and a Stakeholder Advisory Committee. Proposed legislation to support the strategy was posted to the Environmental Registry for public comment in June 2008.

On December 2, 2008, the government passed the *Lake Simcoe Protection Act, 2008 (LSPA)*. The purpose of the Act is to "protect and restore the ecological health of the Lake Simcoe watershed." The Act requires the creation of the Lake Simcoe Protection Plan (the "Plan") and the establishment of two minister's advisory committees: the Lake Simcoe Science Committee and the Lake Simcoe Coordinating Committee.

The Minister of the Environment shall prepare an annual report that describes the measures taken to implement the Plan and summarizes the advice received from the advisory committees (i.e., Science and Coordinating Committees). Additionally, the Act requires the minister to prepare a five-year report,

detailing monitoring program results and how the objectives of the Plan are being achieved. The Act specifies that both the annual and five-year reports will be posted on the Environmental Registry.

The LSPA allows MOE to create regulations for activities that may adversely affect the ecological health of the watershed. One example is the shoreline protection regulation to regulate or prohibit activities in or around the shoreline, tributaries and wetlands of the watershed. This regulation could establish new shoreline permits to govern activities that may adversely affect the ecological health of the Lake Simcoe watershed. Additional regulations can be created to require municipalities to pass tree cutting or site alteration by-laws under the Municipal Act, 2001 and for transitional matters related to the implementation of the Plan.

To curb phosphorus or other nutrient inputs into Lake Simcoe, the Act enables the government to make a regulation to establish a water quality trading system by amending the *Ontario Water Resources Act* (*OWRA*). Water quality trading is an approach to achieve water quality targets or objectives where polluters can offset or purchase pollutant reduction credits from within the watershed. The Minister of the Environment must prepare and place on the Environmental Registry a water quality trading feasibility report, followed by a response statement before the regulation can be made.

Lake Simcoe Protection Plan

On June 2, 2009, MOE released the final Lake Simcoe Protection Plan, established under the *Lake Simcoe Protection Act, 2008 (LSPA)*. The Plan consists of targets, indicators, and policies organized into categories, including: aquatic life, water quality, water quantity, shorelines and natural heritage, other threats and activities (e.g., invasive species, climate change and recreational activities), and implementation.

The policies in the plan are grouped into four categories:

- 1) Designated *Planning Act, Condominium Act, 1998* and prescribed instrument decisions must conform with these policies;
- 2) Have regard to *Planning Act, Condomium Act*, and prescribed instrument decisions must have regard to these policies:
- 3) Minitoring policies commit public bodies such as ministries, municipalities, and conservation authorities to implement monitoring programs; and
- 4) Strategic action are legally non-binding and include policies related to research, stewardship, education and outreach and best management practices.

Designated and have regard to policies affect how decisions are made under specific statutes. However, designated policies are the only policies in the Plan with legal effect under the *LSPA*. The other two policies deal with monitoring by and strategic actions for public bodies, such as provincial ministries, municipalities or Conservation Authorities.

The Plan includes a commitment to water quality targets, such as a long-term reduction of phosphorus loading to 44 tonnes per year to achieve dissolved oxygen levels of 7 mg/L in the lake. However, the Plan lacks any targets for water quantity, such as targets for water conservation or efficiency plans. The Plan includes a commitment to water quality targets such as a long-term reduction of phosphorus loading to 44 tonnes per year to achieve dissolved oxygen levels of 7 mg/L in the lake. However, the Plan lacks any targets for water quantity, such as targets for water conservation or efficiency. The Plan does include a non-binding strategic action policy that commits specific municipalities to establish targets as part of their water conservation or efficiency plans within the next five years. The absence of any clear watershed level targets for water quantity may render the efforts largely ineffective.

The ECO will review this decision in the 2009/2010 Annual Report and will continue to monitor the implementation of the Plan.

Background: A Watershed in Trouble:

Located about an hour north of Toronto, the Lake Simcoe watershed is home to approximately 350,000 permanent residents and an additional 50,000 seasonal residents. The watershed crosses 23 municipal boundaries, including those that make up York and Durham Regions. It also contains a portion of the Oak Ridges Moraine, regulated under the Oak Ridges Moraine Conservation Act, 2001 and the provincially designated Greenbelt, regulated under the Greenbelt Act, 2005. The watershed has many natural heritage features, including habitat for over 32 species at risk, as well as being a popular ice fishing destination.

From 1820 to 1890, early settlers began converting forests to agricultural land on the eastern and western shores of Lake Simcoe. Over the last few decades, extensive development pressure has been evident in the watershed. Communities grew rapidly with a population expansion of 30 per cent from 1991 to 2001 and almost 67,000 new homes constructed to accommodate this growth. In addition, the population within the watershed is anticipated to increase further as a direct result of the Growth Plan for the Greater Golden Horseshoe under the *Places to Grow Act, 2005.* For example, the County of Simcoe, Barrie and Orillia must plan to accommodate an additional 275,000 residents by 2031, a 70 per cent increase compared to their 2001 population level of 392,000.

As a result of human development and extensive erosion caused by agriculture, phosphorus loading increased threefold from presettlement rates. Human sources of phosphorus in Lake Simcoe come from sewage treatment plants' discharge, erosion and runoff from agriculture lands, septic systems, stormwater run off from urban areas, and atmospheric deposition from the combustion of fossil fuels and forest fires

Excessive phosphorus is considered the main threat to water quality in the Lake Simcoe watershed. An increase in phosphorus leads to an increase in aquatic plant and algae biomass, which contributes to the depletion of dissolved oxygen in the bottom layer (hypolimnion) of the lake and degradation of the critical habitat of coldwater species. Studies found that as hypolimnetic water quality declined in Lake Simcoe, recruitment failure of lake trout (*Salvelinus namaycush*), lake whitefish (*Coregonus clupeaformis*), and lake herring (*Corgonus artedii*) occurred during the 1960s, 1970s and 1980s, respectively. Currently, the lake trout and lake whitefish populations are maintained or supplemented through hatchery stocking programs.

The Lake Simcoe Science Advisory Committee identified additional stressors that affect the Lake Simcoe ecosystem. These stressors include invasive species, other pollutants (e.g., toxics, contaminants, pharmaceuticals and sediments), pathogens (primarily bacteria contaminants), climate change, water extraction and other human pressures such as fishing, fish stocking and boating.

Over the past few decades, management initiatives have been implemented by multiple agencies to improve the health of the watershed. Efforts included nutrient loading abatement, fish stocking and harvest regulations and public education. Of notable mention is the LSEMS, led by the Lake Simcoe Region Conservation Authority (LSRCA) to improve and protect the health of the watershed and improve associated recreational opportunities, including re-establishing a naturally reproducing fishery. LSEMS was executed in three stages from 1990 to 2007 and included representatives from MOE, the Ministry of Natural Resources (MNR), the Ministry of Agriculture, Food and Rural Affairs (OMAFRA), the Ministry of Municipal Affairs and Housing (MMAH), watershed municipalities and the Chippewas of Georgina Island. As a result of this effort, there have been reductions in phosphorus loading and improvements in dissolved oxygen levels in the deep waters of the lake. In 2006 a small number of naturally reproducing lake trout were discovered.

LSEMS expired on March 31, 2008 and the LSEMS Steering Committee provided recommendations on the next phase of the strategy in the document, "Towards a New Governance Model for Lake Simcoe." The Steering Committee recommended that the partnership not create a new decision-making body. However, the report recommended that that proposed partnership be led by an executive committee, guided by a steering committee, and supported by a LSRCA secretariat. It also recommended that the executive and steering committee include representatives from government, industry and the public.

Implications of the Decision

Strategy to Protect Lake Simcoe:

As of May 2009, MOE had not posted a Lake Simcoe strategy decision notice on the Environmental Registry clearly outlining its decision or a finalized strategy to protect the watershed. However, MOE stated in the *LSPA* proposal on the Environmental Registry that its approach (or strategy) to protect Lake Simcoe is comprised of four key components: passage of the *LSPA*; development of the Plan; development of a new governance structure; and enhancement of existing voluntary tools to protect the watershed.

Lake Simcoe Protection Act:

The Act suggests policies to be included in the Plan, such as policies that support the coordination of environmental, resource management and land use planning programs of various ministries, municipalities, conservation authorities and other local boards. The Act also allows for policies prohibiting any use of land and protecting, improving or restoring key natural heritage and hydrological features and functions. Policies can be included respecting activities governed by prescribed instruments, stewardship activities, and research and monitoring programs. In addition, policies may prohibit official plans and zoning by-laws from being more restrictive than the provisions in the Plan. MOE stated within the Plan that despite this ability, the Plan does not contain any provisions limiting municipalities from adopting restrictive zoning where no specific provincial policy prohibition exists.

The Act provides the authority for MOE to create a transitional regulation to address how designated policies in the Plan would affect applications, matters or proceedings that were commenced prior to the Plan coming into effect but not yet decided. However, MOE stated in the draft Plan that the regulation would generally apply to applications under the *Planning Act* and *Condominium Act* or in relation to prescribed instruments commenced after the Plan comes into effect. This type of "grandfathering clause" for development proposals has created ongoing issues with the effectiveness of provincial policies and plans to protect natural features. For example, development proposals submitted before the Niagara Escarpment Plan was passed in 1985 are still being disputed.

The Act allows the LSRCA to extend the application of its development, interference with wetlands and alterations to shorelines and watercourses (O. Reg. 179/06) under the *Conservation Authorities Act* to an area outside its current jurisdiction. The LSRCA jurisdictional boundary does not cover the entire watershed boundary. Under the *Conservation Authorities Act*, conservation authorities, including LSRCA, regulate development and activities in river or stream valleys, the shorelines of the Great Lakes and large inland lakes (such as Lake Simcoe), hazardous lands and wetlands. Conservation authorities also regulate the straightening, changing, diverting or interfering in any way with the existing channel of a river, creek, stream, and watercourse or changing or interfering in any way with a wetland. Cabinet has the authority to make a regulation that prescribes additional municipalities for the LSRCA.

The LSPA creates two advisory committees, the Lake Simcoe Science Committee and the Lake Simcoe Coordinating Committee. The Lake Simcoe Science Committee will review the conditions of the watershed and provide advice to the Minister of the Environment on its health, threats and strategies to deal with threats, and any scientific research needs. At the request of the minister, the Science Committee will provide advice on monitoring programs, amendments to the Plan or any regulations made under the LSPA. The Lake Simcoe Coordinating Committee will discuss the implementation of the Plan and any issues that may arise. Additionally, the Coordinating Committee can provide advice to the minister on issues similar to advice provided by the Scientific Committee.

Public Participation & EBR Process

On March 27, 2008, MOE posted a proposal notice on the Registry to invite public input on the proposed strategy to protect Lake Simcoe for a 36-day comment period. On June 17, 2008, MOE posted a proposal notice on the Registry to invite public input on Bill 99, the *Lake Simcoe Protection Act, 2008*. MOE provided a 60-day public review and comment period on the Registry. On January 13, 2009, the

draft Lake Simcoe Protection Plan was posted on the Registry for a 62-day public review and comment period.

Lake Simcoe Protection Strategy:

The following summary of comments is illustrative of some of the issues that were raised.

Many commenters expressed concern that the proposed goal statement, "to improve and protect the health of the Lake Simcoe watershed ecosystem and improve associated recreational opportunities," focused too narrowly on recreational activities. The Ontario Sewer and Watermain Construction Association suggested broadening the goal to include agriculture, residential housing, employment and growth planning considerations. Some commenters, such as the Ontario Home Builders Association, stated that the goal should focus more directly on water quality. The Canadian Institute for Environmental Law and Policy suggested the strategy address water quality issues beyond nutrients, such as pharmaceuticals and personal care products. Additionally, LSRCA suggested the goal focus on the coordination of partners and their programs to avoid confusion and duplication regarding agency roles and responsibilities.

Commenters provided suggestions on the content of the Plan. York Region suggested extending the control and regulation of phosphorus inputs beyond municipal waste water treatment and urban stormwater runoff to include atmospheric deposition and non-point source agricultural contributions. Municipalities such as York Region and the City of Barrie recommended that the Plan identify and acknowledge requirements of the *Places to Grow Act, 2005.* York Region also recommended that the Plan require the protection, enhancement and restoration of natural heritage features.

Numerous commenters, such as Durham Region and LSRCA, stressed the need for MOE to provide stable and long-term funding to implement the strategy. The Ontario Federation of Agriculture suggested that funding be provided for ecological goods and services, decommissioning unused wells and scientific research programs. LSRCA and the City of Barrie identified key existing programs that would benefit from additional funding, including: LSRCA's Landowner Environmental Assistance Program (LEAP); the Lake Simcoe Conservation Foundation Funding Program; the Ontario Drinking Water Stewardship Program Funding (under the *Clean Water Act, 2006*); the Oak Ridges Moraine Foundation; and the Friends of the Greenbelt Foundation.

Commenters provided support for one of two government structures for the strategy: a structure recommended by the LSEMS Steering Committee or one proposed by the LSEMS Working Group. The Town of Georgina, York Region, LSRCA, Lakewatch Society (Canada), and the North East Sutton Ratepayers Association, and the Building Industry and Land Development Association (BILD) supported LSEMS Steering Committee's recommendation that no new government entity be created. In contrast, Campaign Lake Simcoe (supported by 38 groups and organizations) supported the LSEMS Working Group recommendation that a new governance structure be created which is inclusive, representative, and independent, with direct line reporting to the Government of Ontario.

Durham Region suggested that the government "enforce current legislation through enhanced regulatory tools, additional resources, monitoring and enforcement, before introducing another layer of new legislation, regulation and plans specific to Lake Simcoe."

LSRCA expressed concern about developing legislation for a new watershed entity that would duplicate and conflict with the *Conservation Authorities Act*.

Campaign Lake Simcoe recommended that large scale developments and marina resorts such as Big Bay Point be consistent with the Act, that grandfathering of projects lacking final approval not be allowed, and that significant alteration to shorelines be prohibited.

Lake Simcoe Protection Act:

Commenters were generally supportive of legislation to protect Lake Simcoe and provided similar recommendations and concerns raised during the consultation on the strategy. The following summary of comments is illustrative of issues that were raised, beyond those mentioned in the previous section.

Conservation Ontario and a few conservation authorities, such as LSRCA, Nottawasaga Valley Conservation Authority and Rideau Valley Conservation Authority expressed concern with the potential for duplication, overlap and inefficiency between the *LSPA* and the *Conservation Authorities Act*. Both Acts enable the creation of watershed management plans and shoreline regulations. A major difference exists between the Plan under the *LSPA* and watershed management plans under the *Conservation Authorities Act*. the implementation of conservation authority plans is voluntary by municipalities. For example, municipalities have discretion on whether or not to incorporate the conservation authority watershed management plan into its official plan. However, Conservation Ontario and the conservation authorities were supportive of a provincially mandated watershed plan for the protection of Lake Simcoe.

York Region Environmental Alliance and Environmental Defence/Campaign Lake Simcoe (supported by 45 groups and organizations) suggested that the Plan put in place designated policies to protect, improve and restore the watershed's key hydrologic features and their functions, and key natural heritage features and their functions. This would ensure that natural forest and wetland cover, composition and connectivity enhance Lake Simcoe's water quality and the watershed's biodiversity.

York Region, Environmental Defence and York Region Environmental Alliance expressed concern that the Act enables the Plan to contain policies prohibiting official plans and zoning by-laws from containing provisions that are more restrictive than the provisions in the Plan. The groups suggested that municipalities retain the ability to create more restrictive (not less restrictive) policies and standards.

On June 18, 2009, MOE posted three decision notices: the first for the Lake Simcoe protection strategy; the second for the *LSPA*, which was passed and received Royal Assent December 10, 2008; and a third establishing the Lake Simcoe Protection Plan pursuant to section 3 of the Act. The Plan and sections 7 and 8 of the *LSPA* came into effect June 2, 2009.

Additional Public Consultation:

During the comment periods for the strategy and the *LSPA*, MOE held three community partner workshops and several focused stakeholder meetings (i.e., agriculture sector, Town of Georgina, Simcoe Chapter of Building Industry and Land Development and the Lake Simcoe Region Conservation Authority). MOE began an Aboriginal Engagement Strategy in December 2007 that focused on early engagement and outreach activities to support the draft legislation.

MOE did an adequate job on public consultation for this strategy and legislation through the use of the Environmental Registry, public consultation sessions and workshops. The ECO commends MOE for establishing a Minister's Science Advisory Committee and a Stakeholder Advisory Committee in the development of the strategy and legislation.

SEV

As of May 14, 2009, MOE had not provided the ECO with its Statement of Environmental Values and therefore the ECO was not able to review and provide any comments.

Other Information

In 2006, environmental groups became concerned with a number of large-scale resorts and marinas proposed for development on the shores of Lake Simcoe. Since only Lake Simcoe's southeast shoreline is governed by the *Greenbelt Act*, a portion of the watershed, including Simcoe County, is unprotected by the provisions within the Greenbelt legislation. Campaign Lake Simcoe, a coalition of environmental groups, said that "Simcoe County has been referred to as Ontario's 'Wild West' of development, with dozens of development applications leap-frogging over the Greenbelt and into south Simcoe County."

Responding to the concerns, Bill 106, the *Lake Simcoe Protection Act*, was first introduced as a private members' bill on April 25, 2006. Although Bill 106 never reached second reading in the legislature, Campaign Lake Simcoe continued to advocate for its passage. In July 2007, the government announced plans to introduce an Act to protect Lake Simcoe.

On March 26, 2008, MOE filed O. Reg. 60/08 – Lake Simcoe Protection, under the *OWRA*. The regulation set interim (April 1, 2008 – March 31, 2009) limits on phosphorus loading into Lake Simcoe on all existing municipal and industrial sewage treatment facilities within the watershed. It also prohibited the development of new sewage treatments plants in the watershed and imposed design standards on new stormwater facilities to service new developments in the watershed. MOE identified that the regulation was part of the strategy to protect Lake Simcoe. The ECO reviewed this regulation in the Supplement to our 2007/2008 Annual Report (pages 137-141).

On March 31, 2009, MOE posted an exception notice on the Environmental Registry to extend the regulation under the *OWRA* for the protection of Lake Simcoe - Ontario Regulation 60/08 (*EBR* Registry Number 010-6308). The regulation was amended to extend the phosphorus loading caps imposed on sewage treatment plants in the Lake Simcoe watershed until March 31, 2010. MOE stated in the Registry notice that this extension will allow it to develop a phosphorus reduction strategy. The ECO will continue to monitor progress on the development and implementation of that strategy.

On June 2, 2009, MOE released the final Lake Simcoe Protection Plan and additional details are provided in the text box.

On June 3, 2009, MOE filed a regulation O. Reg. 219/09 – General, made under the *LSPA*, that covers matters related to implementing the Plan, including transition and the watershed boundary.

ECO Comment

The ECO commends MOE for undertaking a strategy, enacting legislation, and developing its Plan to provide increased protection to the Lake Simcoe watershed. The ECO acknowledges past efforts taken under the LSEMS to reduce phosphorus concentrations in the lake and re-establish some naturally reproducing cold water fisheries (such as lake trout). However, concern for Lake Simcoe's watershed remains; uncertainty still surrounds the lake's response to ongoing and future environmental stressors in the watershed, such as increased development and population growth, land use changes, climate change, and new invasive species.

The ECO supports MOE's use of a landscape-level approach based on watershed planning in its strategy to protect and enhance Lake Simcoe. The ECO is especially encouraged that MOE has legislated a watershed management plan in Ontario's land use planning system to address environmental concerns.

Over the past decade, the Ontario government has enacted site or landscape-specific legislation to enhance environmental protection, such as the *Greenbelt Act, 2005*, the *Oak Ridges Moraine Protection Act, 2001* and now the *LSPA*. Although the ECO is generally supportive of these environmental statutes, this trend in landscape-specific law, policies and land use plans clearly point to inadequate protection for ecosystem features and functions in southern Ontario's overall land use planning system (i.e., guided by the *Planning Act* and the Provincial Policy Statement). While MOE's approach to address environmental issues in Lake Simcoe is commendable, the ECO questions the use of this model for other watersheds in the province. The ECO wonders if resources used to develop the Lake Simcoe strategy would have been better allocated to examine and enhance current legislation, policies and activities to protect and restore the ecological health of all watersheds in Ontario.

Although the ECO is pleased that the overall goal of the Lake Simcoe Protection Act, 2008 does not focus exclusively on phosphorus loading, the ECO encourages MOE to maintain long-term phosphorus loading targets to reduce and limit further phosphorus inputs. Since Lake Simcoe has received excessive amounts of phosphorus which has accumulated in sediments over so many decades, its resilience to future land use changes and stresses such as climate change and invasive species may have been

severely compromised. Hence, the success of the *LSPA*, the Plan, and the phosphorus reduction strategy is of paramount importance. The ECO will continue to monitor and review MOE's progress and implementation of the Lake Simcoe Protection Plan.

Review of Posted Decision:

4.6 Waste Electrical and Electronic Equipment (WEEE) Program Plan

Decision Information:

Registry Number: 010-3125 Comment Period: 30 days Proposal Posted: April 9, 2008 Number of Comments: 26

Decision Posted: July 10, 2008 Decision Implemented: Phase 1 - April 1, 2009

Description

On July 10, 2008, the Minister of the Environment approved the first phase of the Waste Electrical and Electronic Equipment (WEEE) Program Plan (the "Program Plan"). This five-year plan was developed by Waste Diversion Ontario (WDO) in co-operation with Ontario Electronic Stewardship (OES) to improve the diversion of computers, monitors, printers, disk drives, keyboards, computer mice, fax machines and televisions from landfill. WDO is a non-crown corporation created by the *Waste Diversion Act, 2002* (*WDA*) to develop, implement and operate waste diversion programs (see page 164 of the Supplement to our 2007/2008 Annual Report).

Background:

Innovation in communications and information technology is extremely rapid and shows no sign of slowing down. With the processing power of high technology products doubling about every two years, the result is not only smaller, more sophisticated and cheaper electronics, but also rapid obsolescence and short-lived generations of equipment. Moreover, with the requirement for U.S. and Canadian television broadcasters to switch to all-digital signals, the number of discarded analog televisions is expected to rise sharply. The Ministry of the Environment (MOE) estimates that Ontario households and businesses discard approximately 90,000 tonnes of old computers, printers and televisions annually. This number is projected to grow to 123,000 tonnes/year within five years, representing the annual discard of about four million desktop computers, 1.5 million laptops and 2.2 million televisions.

The Problem with WEEE:

The increase in WEEE in Ontario is concerning not only because of limited landfill space, but because WEEE often contains dangerous materials (e.g., lead, cadmium, mercury, chromium, brominated flame retardants) that when dumped or incinerated threaten environmental and human health (see pages 180-186 of the ECO's 2003/2004 Annual Report). Jurisdictions without a formal WEEE recovery program often export electronic waste to developing countries, where toxins in disassembled WEEE can harm low-paid workers and contaminate waterways. Although the United Nation's Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal and Canada's Export and Import of Hazardous Waste and Hazardous Recyclable Material Regulations are designed to control the movement and dumping of hazardous waste across national borders, WEEE exporters can sidestep these restrictions by claiming the material as products to be repaired and reused by impoverished people.

WEEE Management in Ontario:

Since the provincial government does not require municipalities to manage WEEE, municipalities that have initiated WEEE collection programs have done so voluntarily, resulting in a wide variety in programs. Municipal collection systems can vary in terms of the permanency and seasonality of collection depots, the use of "mobile" events to collect WEEE and the range of WEEE items accepted. Moreover, some municipalities charge residents a small fee when they drop off WEEE items for recycling. As a result of

these program differences, residents may find collection programs to be inconvenient and confusing. OES reports that there are no data available regarding the recycling, refurbishment or export of materials from municipal programs.

In addition to municipal programs, some manufacturers and importers of electrical and electronic equipment voluntarily collect and manage WEEE by direct mail-back from customers or by running special events in conjunction with retailers and community groups (see www.epsc.ca for information on specific manufacturer recycling programs). Some retailers also provide opportunities for customers to return or donate WEEE for proper management.

Collected WEEE is sent to primary processors, who undertake any of the following: receiving, sorting, brokering, transporting, dismantling, disassembling, shredding or any other material processing activity, and disposal. In Ontario, primary processors have traditionally secured tonnage of WEEE by providing services (e.g., direct collection or pick-up) to municipalities, manufacturers, and the industrial, commercial and institutional (IC&I) community. Although the WEEE processing infrastructure is well established in and within close proximity of Ontario, companies can vary greatly in their monitoring, tracking and processing standards.

While some primary processors prepare WEEE for further processing and recycling, others are reuse and refurbishing organizations or companies that donate/resell WEEE. This sector includes both non-profit organizations that redistribute, at no charge, reusable equipment for social purposes (e.g., for the Ontario school system, the local community, or distribution overseas) and commercial for-profit operations that sell equipment and components into the Ontario and North American markets or to overseas markets with unknown end-of-life implications. OES notes that the promotion of WEEE reuse opportunities is typically both localized and intermittent.

After the recovery of recyclable and non-recyclable components by primary processors, downstream processors further manually or mechanically separate WEEE materials to recover specific resources (e.g., metals and plastics). Downstream processing, which may involve many vendors, includes: shredding, grinding, smelting, incineration, energy recovery and landfill disposal of non-recoverable materials. When it occurs outside of North America, downstream processing may not always comply with the Basel Convention or the Canada-Wide Principles for Electronics Product Stewardship as issued by the Canadian Council of Ministers of the Environment.

Despite opportunities for the reuse, refurbishment and recycling of WEEE in Ontario, OES estimates that 73 per cent of Phase 1 WEEE (see Table 1) from Ontario is landfilled or exported to unknown overseas locations with unidentified environmental and human health implications.

Ontario Government Action on WEEE Diversion:

The Ontario government began taking action on WEEE in December 2004 when it defined and designated WEEE in O. Reg. 393/04 – Waste Electrical and Electronic Equipment, made under the WDA and requested that WDO undertake a study of the state of WEEE management in Ontario. The WEEE study was submitted in July 2005 to the Minister of the Environment. After reviewing the study, in June 2007 the minister sent a letter requesting that WDO:

- Develop a WEEE program in phases, beginning with Phase 1 materials (see Table 1);
- Establish an Industry Funding Organization (IFO), including stewards affected by the WEEE Program, to coordinate, alongside WDO, the development and implementation of the WEEE Program; and
- Within one year of the approval of the Phase 1 Program Plan, develop and submit for approval a diversion program for Phase 2 WEEE (see Table 1).

Table 1: Phase 1 and Phase 2 WEEE Materials

Phase 1 - Implemented April 1, 2009 Phase 2 – Implementation Date to be Determined Personal computers (desktops, Copiers, typewriters and modems laptops, notebooks and notepads) Personal computers (handheld) CD-ROM and computer disk drives Personal digital assistants (PDAs) Computer terminals, keyboards and Computer flatbed scanners computer mice Telephones (cellular, cordless and wire line) Microcomputers and minicomputers and pagers Monitors (Cathode Ray Tube, Telephone answering machines Liquid Crystal Display and plasma) Amplifiers, preamplifiers and equalizers **Printers** Radios, receivers, speakers, tuners and Fax machines turntables Televisions (Cathode Ray Tube. Video players, projectors and recorders (tape, Liquid Crystal Display, plasma and disk and digital) rear projection) Audio players and recorders (tape, disk and digital) Cameras (tape, disk and digital)

Source: Final Waste Electrical & Electronic Equipment (WEEE) Program Plan (Ontario Electronic Stewardship, March 31, 2008).

OES was incorporated in September 2007 and was approved in October 2007 by WDO as the IFO for WEEE. In March 2008, OES and WDO submitted the WEEE Program Plan to the Minister of the Environment. WEEE items listed in O. Reg. 393/04 that are not covered by Phases 1 and 2 of the Program Plan are to be phased-in, in accordance with future request letters to WDO from the Minister of the Environment.

Overview of Phase 1 of the WEEE Program Plan:

Brand owners, first importers and/or assemblers of non-branded electrical and electronic equipment (EEE) for sale and use in Ontario are designated in the Program Plan as stewards. Stewards are required to pay fees to OES to cover the program's operational costs, which are estimated to be \$62 million in year one. Individual stewards that wish to take direct responsibility for managing their obligations under the WDA can apply to the WDO for approval of an Industry Stewardship Plan (ISP). Nonetheless, the WEEE Program Plan requires that all stewards register with OES and pay approved fees unless and until such an ISP is approved. The government will not receive any of the fees collected by OES from WEEE stewards.

Under the Program Plan, generators of WEEE, including individual consumers and IC&I users, will be educated and empowered to make decisions regarding the destination of their WEEE, whether for reuse, refurbishment or destruction via recycling. Through implementation of the Program Plan, OES intends to provide convenient opportunities to reuse and recycle end-of-life electronic products. WEEE generators will be able to dispose of their WEEE via OES-approved depots and collection services provided by municipalities and reuse, recycling, waste management and charitable organizations. OES plans to support and expand Ontario's existing WEEE collection system by offering weight-based financial incentives and transportation services for WEEE that is collected for end-of-life management. Although existing reuse and refurbishment organizations will be encouraged to act as collection sites and expand their operations, they will be required to meet OES's Reuse & Refurbishment Standard to participate in the program. Under the Program Plan, participation in the program by all collectors (e.g., municipalities, retailers and reuse organizations) is voluntary.

WEEE collected at OES-approved collection sites will be transported to consolidation centres for quality check, verification and recording of monitoring data before shipment to primary processors. Under the Program Plan, OES selects primary processors through a Request for Proposal (RFP) process and allocates collected WEEE to selected processors through a competitive bidding process. Primary processors may then send WEEE components to downstream processors for the further manual or mechanical separation of materials. To participate in the program, processors must meet not only

regulatory requirements, but also OES's Electronic Recycling Standard, which is intended to assist in determining whether WEEE materials are managed in a way that safeguards worker health and safety and the environment. Materials managed through incineration, energy recovery and landfill do not constitute diversion under the WEEE Program Plan. Transportation of WEEE between collection sites, consolidation points and primary processors will also be contracted by OES through a competitive RFP process.

Table 2: Baseline estimates and targets for reuse, accessibility, collection and recycling of Phase 1 WEEE in Ontario.

	Baseline (2007)	Year 1	Year 2
Reuse	8,636 tonnes (9.5%)	9,994 tonnes (10.2%)	12,972 tonnes (11.9%)
	Baseline (2007)	Year 1	Year 5
Collection sites	167	422	655
Collection	24,800 tonnes (27%)	42,000 tonnes (43%)	75,300 tonnes (61%)
Recycling	18,700 tonnes (20%)	31,500 tonnes (32%)	64,000 tonnes (52%)
Note: Percentage rates are based on estimated WEEE available for collection			

Source: Final Waste Electrical & Electronic Equipment (WEEE) Program Plan (Ontario Electronic Stewardship, March 31, 2008).

The Program Plan contains no targets for reducing the amount of WEEE produced. Instead, the Program Plan states that "while OES will not have authority to compel individual Stewards to undertake activity in this area, the OES Program will include in its annual reporting to WDO examples and analysis of reduction activities..." OES anticipates that the results of a weight-sampling study (to assess baseline data on EEE supplied to Ontario) will assist OES in evaluating the potential for establishing reduction targets after Year 1.

The Program Plan includes a province-wide promotion and education program to help achieve collection, reuse and recycling targets. Moreover, the Program Plan includes research and development activities to support and increase the effectiveness and efficiency of WEEE collection and diversion. Research and development priorities include a pilot program to assess options for collecting large televisions and an assessment of options for improved plastics recycling.

Implications of the Decision

Increased WEEE Diversion:

The Program Plan aims to triple the amount of Ontario WEEE collected and recycled over the next five years. The projected increase in the number of collection sites and programs across Ontario means that owners of unwanted EEE will have more convenient opportunities to dispose of their products in a responsible manner. Moreover, WEEE generators will be able to choose whether their material is sent for reuse, refurbishment or recycling. It will generally be up to WEEE generators, however, to cover the costs of transporting WEEE to collection sites.

Fees on EEE Products:

Under the Program Plan, WEEE stewards have been required since April 1, 2009, to pay OES a fee for each EEE product sold in or introduced into Ontario. The first year fees vary from 32 cents per computer mouse and keyboard to \$10.07 per television to \$13.44 per desktop computer. It is the responsibility of individual stewards to determine how their fees will be managed internally and, ultimately, how the fees will be reflected in their product costs. In other words, manufacturers may shift the cost of the fee forward by raising the product price, or shift it back by cutting wages and salaries payable to workers, or reduce the income accruing to the company's shareholders. If the cost is passed on to consumers, it is at the manufacturer's discretion whether the fee is included in the product price or added as a separate recycling surcharge. The Program Plan requires stewards to monitor and report on the quantities of EEE products sold in Ontario each year so that OES can calculate annual stewardship fees and measure program performance.

Incentives for WEEE Collectors:

Collectors that are approved by OES to collect, sort and prepare WEEE for transport to processors are eligible under the Program Plan to receive a collection incentive of \$165 per tonne as well as equipment, staff training, and transportation and processing services. OES also covers the costs of OES collection events hosted by retailers and municipalities and the costs of transporting WEEE to and from OES-selected consolidation centres. In order to receive incentives, however, collectors and collection sites: must collect all, or a subset of, Phase 1 WEEE products; must not exclude any brands from collection; must be accessible to the public; and must report collected weights of WEEE by category. Moreover, collected WEEE must be directed to a consolidation centre for processing allocation by OES; OES will not provide collection or transportation incentives for collected WEEE that is destined for refurbishment and/or reuse.

Increased Environmental Standards for WEEE Management:

Historically, WEEE collectors, transporters and processors in Ontario have been required to adhere to general provincial legislation on waste management, health, safety and environmental protection. The Program Plan now also requires WEEE management organizations registered in the OES WEEE program to follow a number of environmental performance requirements that serve to safeguard the health of workers and the environment. For example, the Electronics Recycling Standard does not allow OES-approved primary processors to export WEEE to countries that are not members of the Organization for Economic Co-operation and Development (OECD) unless they can demonstrate that downstream processors in recipient nations meet or exceed environmental, health and safety standards equal to Ontario requirements.

Increased Tracking of WEEE Flow:

The WEEE program provides for better tracking of the flow of WEEE from the point of collection through to its final destination. Tracking data will be used to assess program performance and progress in meeting target collection and diversion rates. Moreover, tracking, auditing and security requirements will help to restrict the removal or export of WEEE to unknown destinations and reduce opportunities for fraud, collusion and inclusion of non-Phase 1 and non-Ontario WEEE.

Government Control of WEEE Markets:

The Program Plan gives OES not only control of the environmental and safety standards used by participating collectors, transporters, consolidators and processors, but also the power to decide which companies are contracted and the amounts of WEEE allocated to each processor. The Program Plan divides Ontario into four consolidation regions (central, east, west and northern) within which consolidation centres will be established to maximize efficient transportation activities. Likewise, the Program Plan includes the establishment of transportation zones that dovetail with the locations of consolidation centres and primary processors. Transportation services, consolidation centres and processors will be selected by OES through "open and competitive processes" based on several factors, including environmental performance, location, service ability, experience, security and cost.

Public Participation & EBR Process

The proposed Program Plan was posted on the Environmental Registry in April 2008 for a 30-day comment period. MOE received 26 comments. In July 2008, the Minister of the Environment approved the proposed Program Plan without revisions.

To support plan development, WDO and OES consulted with stewards and stakeholders through a series of workshops, with simultaneous webcast, and stakeholder meetings. Three versions of the Draft Program Plan were posted for comment on OES's website, and OES stated that it considered stakeholder comments when revising each version of the plan.

In general, municipalities, industry stewards and environmental groups strongly supported an industry-funded diversion program. The Canadian Institute for Environmental Law and Policy (CIELAP), for example, congratulated OES for developing an extensive plan that establishes standards to protect environmental and human health, helps to ensure that WEEE is not sent to non-OECD countries for

disposal, and emphasizes the development of better collection infrastructure to strengthen WEEE diversion. The Salvation Army stated the program "has the potential to help organizations like ours to recover financial losses resulting from illegal dumping [at our facilities], thus, allowing us to point those funds back to our charitable programs and services."

Despite general support for the Program Plan, some organizations believe the plan is fundamentally flawed from both an environmental and economic perspective, and feel that their submitted concerns were disregarded in the development of the plan. For example, the Ontario Electronic Resource Recovery Alliance (OERRA), an organization that represents a number of for-profit and non-profit recyclers, refurbishers and other waste management service providers, stated "despite our good faith participation in the process we have been largely ignored. Where we have offered better program delivery alternatives to what OES has proposed those alternatives have met with superficial and subjective commentary by OES and then have been dismissed."

Stakeholders had a variety of specific criticisms of the Program Plan and recommendations for OES, WDO and MOE, as described below.

Interference in Existing WEEE Markets:

Several stakeholders, including OERRA, the Canadian Taxpayers Federation (CTF) and a large metal recycling company, argued that the WEEE Program Plan is highly intrusive, will damage a growing industry, will stifle innovation and investment, and will create an OES-controlled monopoly in which processors will be forced to compete for government tenders. OERRA stated that the Program Plan "threatens the very existence of our businesses" since OES's tendering-contracting scheme and regional caps on WEEE allocation will "reduce the number of collector-processors businesses in Ontario from an estimated 50 business [sic] to perhaps 5 at the most." Likewise, the metal recycling company argued that it will be very difficult for a recycler to justify a business case to investors when its supply of WEEE is based on a short-term contract with one customer: OES. They therefore felt that WDO is violating section 5(c) of the WDA, which requires the organization to "ensure that waste diversion programs developed under this Act affect Ontario's marketplace in a fair manner."

To meet program requirements while still treating the marketplace in a fair manner, OERRA recommended that OES:

- Retain the environmental standards, tracking and auditing components of the Program Plan;
- Eliminate the tendering, consolidation and allocation processes;
- Set financial incentives that do not supplant existing market transactions; and
- Set processing incentives that are tiered to drive best reuse and recycling practices, meet diversion targets, and drive investment and innovation.

The CTF proposed that the government simply regulate competition and provide registration and accreditation for organizations involved in the program.

Bias of OES Board:

Several organizations argued that there is an inherent bias in the program since it was developed and is controlled by the very industry it affects. Ecojustice stated "we are concerned that OES, whose members are in the business of manufacturing and selling electronics, is not the institution that will lead Ontario away from recycling and towards increased levels of reduction, reuse and remanufacturing." Furthermore, the CTF commented that the WEEE program takes taxing power out of the hands of elected officials and invests it in an unelected and unaccountable body.

Need to Prioritize WEEE Reduction:

Several commenters stated the Program Plan does not sufficiently include design for the environment (DfE) principles to reduce WEEE generation in the first place, an omission that some feel reflects the inherent bias of the OES board (see above). Some noted that not only does the Program Plan lack DfE initiatives, it actively discourages manufacturers from investing in sustainable products, since any cost-savings made in making products greener would be shared among the collective stewards, including

competitors. Ecojustice recommended that the provincial government and WDO provide further leadership to incorporate DfE initiatives into the program as it develops. CIELAP recommended that OES consider adjusting stewards' fees based on a number of sustainability factors, such as product weight, ease of disassembly and recycling, capacity for product reuse and refurbishment, and presence of toxic substances.

Need to Prioritize WEEE Reuse:

Several organizations commented that the Program Plan does not sufficiently prioritize WEEE reuse over recycling and suggested that the 3Rs hierarchy be emphasized. The Regional Public Works Commissioners of Ontario (RPWCO), which represents several large cities and regions (e.g., Toronto, Hamilton, Ottawa and London), noted that while the Program Plan assures continued support of reuse targets, it fails to identify how these markets will be developed. Moreover, another commenter argued that the Program Plan actually creates a disincentive for charities, non-profit organizations, and other collectors to refurbish WEEE for reuse, since the collection incentive and transportation costs are only paid for collected WEEE that is sent to consolidation centres/processors, not refurbished for reuse or resale. Renewed Computer Technology (RCT), a non-profit charitable organization that operates the Computers for Schools program in Ontario stated "this draft plan will severely impact our organization and the positive environmental and economic benefits we deliver in the Province." Several stakeholders recommended that the Program Plan's reuse targets be higher, and RCT recommended that reuse targets be set for all collection points to ensure that a stream of WEEE is reused rather than recycled.

Inadequate Collection Targets:

Both the City of Toronto and Niagara Region commented that the collection targets in the WEEE Program Plan are too low. While they acknowledged that the first year target (43 per cent) is a good start, they recommended more aggressive targets for later years in order to be consistent with municipal waste diversion targets of between 60 per cent and 70 per cent as well as the province's own waste diversion target of 60 per cent.

Collection Incentive:

The OERRA argued that while the \$165/tonne collection incentive may be sufficient to fund municipalities with a publicly funded waste infrastructure (that passively receives WEEE at depots), the incentive is insufficient to support the private sector of proactive collector-processors. The OERRA believes this will unfairly channel WEEE out of the private sector into the municipal system and OES-controlled consolidation system. However, several municipalities and the RPWCO suggested that the collection incentive may be too low even for municipalities to meet the sorting and packing requirements of the Program Plan. The RPWCO recommended that OES review the collection incentive each year to consider all costs of the collection system, including non-depot collection systems.

Accessibility to the Public:

While the Program Plan identifies the number and type of locations where WEEE will be accepted, the RPWCO argued that the plan does not define "accessibility" or identify where these locations will be sited. The RPWCO encourages OES to ensure that drop-off locations are easily accessible to residents living in all parts of Ontario, including those that live in dense urban environments and rural remote locations.

Public Education:

The RPWCO stated that the variation in WEEE programs between municipalities suggests that the provincial WEEE program's educational plan should be tailored to each city or region and coordinated with the municipality.

Phase 2 Implementation:

The RPWCO argued that the public will likely be confused to receive promotional material on both the OES WEEE program and current municipal programs that collect non-Phase 1 WEEE. This concern, together with recognition of the challenges and costs incurred by municipalities to separate Phase 1 materials, led the RPWCO to request that approval of Phase 2 of the program be expedited.

Energy Recovery from WEEE:

The Cement Association of Canada was disappointed that the Program Plan does not consider energy recovery as a diversion solution. This organization stated that its industry can provide downstream support by using non-recyclable plastics as a substitute for fossil fuel (depending on the chemistry of the plastics and the metal content of the materials). Likewise, one recycling company suggested that until commercially viable plastics separation and recycling technology is available, the burning of plastics for energy generation should be allowed under the Program Plan.

Other Comments on the Program Plan:

A large metal recycling company expressed concern about allowing reuse and refurbishing organizations to "cherry pick" valuable components from WEEE, thereby devaluing the WEEE received by processors. Moreover, the company argued that because recyclers are capable of separating, verifying, weighing and labelling WEEE, consolidation is an unnecessary step that adds additional handling, transportation and use of environmental resources.

Several commenters on the Program Plan offered recommendations that, while related to WEEE diversion, fall outside the authority of OES and WDO and thus the scope of the plan:

Restrictions on Toxic Substances:

Given the environmental and health impacts of toxic substances and the limitations they place on recycling ability, several environmental organizations argued that where safe alternatives exist, the use of toxic or hazardous materials in EEE should be banned. They reasoned that such a law would result in less hazardous and more reusable and recyclable WEEE, thereby increasing WEEE diversion.

Restrictions on WEEE Disposal:

A large metal recycling company and several environmental groups reasoned that the government should impose severe restrictions on the disposal of WEEE, thereby funnelling more material into the program. CIELAP and the recycling company recommended that the Ontario government consider banning WEEE in landfills to facilitate achievement of diversion targets.

SEV

In a brief statement, MOE explained that the WEEE Program Plan promotes resource conservation because it adopts diversion principles through the promotion of the 3Rs (reduce, reuse and recycle) approach to waste management. MOE stated that the Program Plan aims to: encourage industry to reduce the amount of waste resulting from their product; promote reuse by making consumers aware of reuse opportunities available; and promote recycling for WEEE that is not reusable. MOE explained that the Program Plan protects the environment by diverting electronic products that contain potentially toxic components away from landfill, protecting our land, air and waterways from pollutants. In addition, MOE stated that the Program Plan embraces the principle of Extended Producer Responsibility (EPR), which requires industry to take responsibility for its products once they reach the end of their useful life. Through EPR, the Program Plan will help bring awareness to industry and consumers of the "interdependence between the environment, economy and society."

Other Information

In 2004, MOE set a provincial goal of diverting 60 per cent of its waste from disposal by the end of 2008 and discussed how the goal could be achieved in Ontario's 60% Waste Diversion Goal – A Discussion Paper. A year later, the Environmental Assessment Advisory Panel (EA Advisory Panel), a panel established by MOE of expert EA practitioners, recommended that MOE develop a policy for the waste sector that included "quantified assessments of the 'need' for specified facilities or projects," including waste diversion projects. MOE agreed and committed to outlining the province's waste priorities in a "statement of provincial priority." In addition, in June 2007, MOE posted a proposal on the Registry (*EBR* Registry Number 010-0420), requesting comment on a draft Policy Statement on Waste Management Planning. The draft policy proposed a waste value chain, which established waste reduction as the first priority, followed by waste reuse and recycling, thermal treatment with energy recovery and, lastly,

thermal treatment or landfill without energy recovery. If the draft policy is approved, municipalities will be required to prepare 20 to 25-year waste management plans describing how they will reach the provincial goal of 60 per cent diversion from disposal.

The WDA mandates that the Minister of the Environment implement a review of the Act within five years of it coming into force (i.e., by June 2007). In October 2008, MOE posted a proposal on the Registry (EBR Registry Number 010-4676), requesting comment on MOE's review of the WDA, and stating that the government is proposing to adopt a zero waste vision to help reduce waste, increase diversion, and build a greener economy and more sustainable society. To facilitate public and stakeholder input on how to improve Ontario's waste diversion framework, MOE included with the proposal notice a discussion paper, which proposes that the first steps towards zero waste include a greater focus on the first and second of the 3Rs – waste reduction and reuse. According to MOE, a zero waste approach "focuses on redesigning products and processes to reduce waste before it is made, as well as designing products for greater re-use."

ECO Comment

The ECO is pleased that a provincial WEEE Program Plan has been developed. The Program Plan is a good step toward tackling the continually growing problem of WEEE. The Program Plan outlines targets, standards and processes to improve the collection of WEEE and ensure that it is recycled in a manner that minimizes human and environmental health impacts. Nonetheless, the ECO believes the Program Plan includes a serious flaw in that it fails to prioritize reduction and reuse over recycling.

The ECO believes that essential to any waste diversion plan are measures to reduce the amount of waste produced in the first place. We are therefore disappointed that the Program Plan does not offer incentives or requirements for manufacturers to: reduce the amount of plastics or toxic substances used in EEE; improve the ease of disassembly and recycling; increase the capacity for product or component reuse; or extend the life of electronics through improved product design and durability. Moreover, because manufacturers are charged a flat recycling fee irrespective of a product's environmental performance, and because improvements to a product's recyclability are shared amongst competing stewards, the Program Plan may actually discourage manufacturers from greening their products. MOE's own WDA discussion paper argues that uniform steward fees provide no direct financial incentive to improve product design and can be "an impediment to reducing waste, increasing reuse, and ultimately striving for zero waste."

We recognize the challenges involved in developing initiatives to reduce the amount of WEEE produced in the province. The rapid rate of technological progress makes it difficult to impose requirements on manufacturers to make electronic products reusable. Moreover, because electronics are largely manufactured abroad and distributed to a global market, it is difficult for a single jurisdiction, like Ontario, to dictate product requirements. Nevertheless, it is clear that the rapid obsolescence of electronic products is unsustainable and threatens societal and environmental health with an ever-growing quantity of hazardous waste. Moreover, we note that despite being regional regulators in a global market, the European Union and California both prohibit the sale of electronic devices containing certain hazardous substances.

The ECO does not believe that the reporting of steward DfE initiatives by OES will be sufficient to help drive manufacturers to produce greener electronic products. The Program Request Letter sent to WDO from the Minister of the Environment in 2007 states that "the Program shall consider incentives encouraging stewards to initiate measures designed to reduce waste resulting from their products, increase recyclability of products and increase use of recycled content of products." To fulfil this request, MOE should ask WDO and OES to strengthen WEEE reduction measures in the program, giving a deadline for the delivery of DfE incentives and initiatives.

After WEEE reduction, reuse should be given priority over recycling. The ECO is therefore disappointed that the Program Plan does not offer collection and transportation incentives for WEEE destined for reuse as it does for "non-reusable" WEEE headed for recycling. While OES states incentives for recycling

represent a new source of revenue for reuse organizations, the ECO is concerned that these incentives may motivate organizations to recycle WEEE that could have been reused. The ECO therefore suggests that the program prioritize reuse over recycling by offering financial incentives for collecting reusable WEEE. Moreover, we are surprised that the program does not include the assessment of WEEE reusability at consolidation centres and the diversion of reusable WEEE from recycling. The ECO believes the Program Plan should set much more ambitious reuse targets and should exclude customer and end-of-lease returns in reuse reporting; electronics returned to a retailer, manufacturer, or leasing company, either because of customer dissatisfaction or the end of a lease, were never expected to be discarded by the customer into the waste stream, and so do not truly represent waste diversion.

The ECO is concerned that the shortage of WEEE reduction and reuse measures in the Program Plan reflects the manufacturer/retailer composition of the OES board. Although the Program Plan has major implications for organizations and companies that consolidate, transport, refurbish or process WEEE in Ontario (see Public Participation & EBR Process above), because stewards can shift the cost of OES fees forward by raising the product price, those that profit from the sale of EEE (i.e., manufacturers and retailers) need change little about their operations, other than administering fees and reporting the quantities of EEE sold. The ECO notes that while the Minister of the Environment originally requested that the WEEE IFO's Board of Directors be mixed in composition, the implementing regulation (O. Reg. 393/04) now requires OES board members to be a "director, officer or employee of a corporation that supplies a product from which WEEE is derived." The ECO encourages MOE to amend O. Reg. 393/04 to require the inclusion of OES board members representing municipalities, recyclers, consumers, and environmental non-government organizations, as intended in the Minister of the Environment's initial request letter.

To actively encourage the diversion of WEEE from landfill, the ECO believes that MOE should consider restrictions on the hazardous materials permitted in EEE, as in the European Union, and a ban on WEEE in landfills, similar to the ban put in place in Nova Scotia.

Review of Posted Decision:

4.7 The Transit Projects and Greater Toronto Transportation Authority Undertakings Regulation

Decision Information:

Registry Number: 010-2760 Comment Period: 45 days
Proposal Posted: March 28, 2008 Number of Comments: 35
Decision Posted: June 25, 2008 Came into Force: June 24, 2008

Description

In June 2008, the Ministry of the Environment (MOE) filed O. Reg. 231/08, the Transit Projects and Greater Toronto Transportation Authority Undertakings Regulation, under the *Environmental Assessment Act (EAA)*. The ministry also introduced an accompanying guide entitled "Ontario's Transit Project Assessment Process," (the "TPAP Guide") which it posted in draft on the Environmental Registry for comment in June 2008 (*EBR* Registry Number 010-3784). On April 2, 2009, a decision notice for the TPAP Guide was posted on the Registry.

The Transit Projects and Greater Toronto Transportation Authority Undertakings Regulation (the "Transit Projects Regulation" or the "regulation") and associated TPAP Guide establish a streamlined assessment process for proponents of public transit projects to follow. The regulation implements a new Transit Project Assessment Process (TPAP). As well, it exempts proponents of public transit projects from the requirements of Part II of the *EAA*, and establishes a time-constrained process that certain projects must

follow in order to maintain the exemption. The TPAP Guide is designed such that the assessment of potential environmental effects and decision-making can be completed within six months.

Background:

The Transit Projects Regulation was developed to facilitate the rapid development of public transit in Ontario due to current and future perceived need. In 2008, the provincial government projected that Ontario's population would grow by 27.8 per cent, or 3.56 million people, between 2007 and 2031, with a significant amount of growth occurring in major urban centres such Ottawa, as well as those within the Greater Golden Horseshoe (GGH). Along with an increase in population, it is predicted that traffic volumes in each of these already congested areas will see a corresponding rise. In the Greater Toronto and Hamilton area (GTHA) alone, more than two million automobile trips are made during the peak travel period each morning, projected to approach three million by 2031. Further congestion will serve to exacerbate current problems such as increased travel times, delayed delivery of goods and services, reduced air quality and higher greenhouse gas emissions. If the response to such congestion is solely through the construction of more roads and highways, significant amounts of land are irretrievably lost.

The government recognizes public transit will play a central role in attempting to mitigate the impacts of increased vehicle use. One of the objectives within the Growth Plan for the GGH, 2006 states that "public transit will be the first priority for transportation infrastructure planning and major transportation investments." This priority is being implemented through a variety of initiatives, including MoveOntario 2020.

The Transit Priority Statement:

Almost one week after posting the regulation proposal notice on the Environmental Registry, the Ministry of Transportation (MTO) posted a 6-page "Transit Priority Statement" policy proposal notice on the Registry in support of the proposed Transit Projects Regulation (EBR Registry Number 010-3128). The Transit Priority Statement (TPS) explains why the province is supporting and investing in public transit. In particular, it highlights the perceived benefits of public transit and the role that increased public transit will play in managing future growth in Ontario. The proposal received only one comment which raised a question about the role the TPS will play given that it has no legal weight. The TPS was not issued under the authority of any provincial statute and so the commenter questioned whether it will have any impact on future planning decisions. (Most provincial policy statements on planning are issued under section 3 of the Planning Act). The commenter recommended that a similar pro-transit policy statement or guideline be developed under the EAA and that MOE ensure that planning decisions are consistent with such a statement. The commenter also suggested that a "transit hierarchy" be created and that sustainability criteria be established by MOE in order to assist proponents in selecting potential transit projects based on environmental, energy and societal benefits. MTO responded to the first suggestion by indicating that it has no legislative role with respect to the EAA and that the suggestion was therefore outside of its scope. In response to the second comment, MTO stated that local municipalities are better positioned to understand local needs and therefore are the best at determining what the benefits of a particular project might be.

On June 25, 2008, MTO posted a decision notice on the Registry, confirming it was proceeding with the Transit Priority Statement as posted.

Announced in June 2007, MoveOntario 2020 outlines the government's plan to invest \$11.5 billion over a 12-year period to improve rapid transit in the GTHA. Through the development of 52 public transit projects, the goal is to build or improve 902 kilometres of rapid transit. According to the government, these improvements will result in a total of 800 million new transit trips per year, removing 300 million car trips each year from Greater Toronto Area (GTA) roads.

In conjunction with efforts to increase the amount of public transit available, MOE has also been working to streamline the environmental assessment (EA) processes that apply to transit projects. Similar to many other public sector initiatives, proposed transit projects must undergo an environmental assessment for public review and input. As discussed in the ECO's 2006/2007 and 2007/2008 Annual Reports, environmental assessment in Ontario has been the subject of much criticism, and various reforms over the years have endeavoured to "fix" a process that many perceived to be broken. The latest reforms were initiated in June 2006 by MOE with a specific goal of delivering faster decisions on, among other undertakings, transit projects. At the time, public transit projects generally had to undergo an individual EA, an often lengthy process which would take, on average, between two and three years according to the Ministry of Transportation. In contrast, an expedited Class EA process existed for road infrastructure. As a result, "municipal transit systems [were]... put to a higher test than other transportation projects."

Following a recommendation made by the Executive Group of the minister's Environmental Assessment Advisory Panel in March 2005, the Municipal Engineers Association (MEA) revised the Municipal Class Environmental Assessment (MCEA) in September 2007 to facilitate municipal transit projects. At the same time that the MEA was revising the MCEA, MOE also proposed to limit transit project EAs to a six month period and subsequently posted the draft regulation on the Environmental Registry in March 2008.

A Comprehensive Approach:

The Transit Projects Regulation broadly defines "transit projects" as any enterprise or activity that is used "exclusively for the transportation of passengers by bus or rail," and anything ancillary to such a facility. Projects covered by the regulation include dedicated bus lanes, light and heavy rail lines, subways, new stations, storage facilities, and ancillary services and facilities such as sidewalks, bike lanes and landscaping associated with transit projects. However, projects designed to widen or extend roads to accommodate high occupancy vehicle lanes are not included. Schedule 1 of the regulation outlines several classes of transit projects that may follow the new process. This schedule specifically limits the application of the regulation to transit projects that are carried out by municipalities, Metrolinx (formerly the Greater Toronto Transportation Authority) or GO Transit. Since the *EAA* does not apply to private sector proponents, the Transit Projects Regulation does not apply to them.

More Streamlined Option:

Prior to this decision, transit projects were subject to Part II of the *EAA* and assessed on an individual basis, or followed an approved class environmental assessment process such as the MCEA. The Transit Projects Regulation, in conjunction with the TPAP Guide, establishes a third "transit project assessment process" (TPAP). The TPAP is a proponent-driven, self-assessment process. The process was designed to narrow the range of issues that may be raised in opposition to a project, place a firm time limit on public consultation and limit MOE's ability to delay a project. The overall goal of the regulation is to reduce the length of time required to complete an environmental assessment so that public transit projects can be constructed in a timely fashion. The regulation stipulates that the TPAP is limited to a six month period, and very specific timelines are outlined for each step of the process.

In order to provide the "streamlined" option for projects that had already begun an environmental assessment process when the regulation came into effect, section 2(3) permitted proponents to "transition" from individual or Class EA processes if notice was provided to the Environmental Assessment and Approvals Branch of MOE by December 22, 2008.

The Transit Project Assessment Process (TPAP):

The TPAP requires less time than a full EA and requires no approvals from MOE. Once a proponent has selected a transit project, they are required to provide public notice that they are beginning the TPAP. Such notice must provide certain information, including a description of the transit project, the proponent's contact information, and information as to how interested parties may obtain a summary of publicly-available documents. Once such notice has been given, proponents have 120 days to conduct public consultations and to complete an Environmental Project Report (EPR). While proponents must consult with people who may have an interest in the transit project, the proponent can conduct consultations in any manner they consider appropriate. During the consultation process, the proponent must provide information on:

- the basis upon which the proponent selected the particular project, including,
 - their assessment and evaluation of possible environmental impacts;
 - the criteria used to assess the impacts;
 - any completed impact studies;
- measures proposed to mitigate any negative environmental impacts; and
- the manner by which any mitigation measures are monitored, if any negative impacts are identified.

Upon completing both the consultation process and the EPR, the proponent must publish a Notice of Completion. The public then has 30 days to review the EPR and to submit written objections to the minister. Written objections must be considered by the minister if they are received within this time period. The minister then has a further 35 days to either allow the transit project to proceed in accordance with the EPR, to require further consideration of the project, or to allow the project to proceed subject to certain conditions set out in a notice. The minister does not have the power to terminate the process and the grounds upon which the minister may act are limited. In particular, the minister may only require further consideration or impose conditions if he or she believes that:

- the project may have a negative impact on a matter of provincial importance that relates to the natural environment or has cultural heritage value or interest, and further steps are required to consider the impact: or
- the project may have a negative impact on a constitutionally protected aboriginal or treaty right, and further steps are required to consider the impact.

If the minister does not provide a response within this period, the proponent is allowed to proceed with the project as outlined within the EPR.

If a proponent subsequently determines that the project may have a negative impact on either of the two above criteria (i.e., provincial importance or aboriginal rights), they may give Notice of Issue to MOE and take a "time out" from the process at any point prior to submitting a Notice of Completion. There is no limit on the length of such a "time out" or on the number of times that a proponent can give a Notice of Issue. Once a proponent decides that they have made reasonable efforts to address the negative impact, they must notify MOE that they are resuming the TPAP.

If the minister requires further consideration of the project, the proponent must prepare and publish a Revised EPR. Within 30 days of receiving this report, the minister may allow the project to proceed in line with the revised report. Alternatively, if the minister determines that further consideration did not adequately address the negative impacts, the minister may issue a notice terminating the TPAP and require the proponent to proceed either under Part II of the *EAA* or under a Class EA.

Once the minister has either given notice to proceed based on the original EPR, the original EPR with conditions or the revised EPR, the proponent may submit and publish a Statement of Completion. As well, a Statement of Completion may be submitted by the proponent if no notice to proceed has been given by the minister within the 65-day period for the original EPR, or within the 30-day period for the Revised EPR.

If the proponent wishes to make changes to the transit project after the Statement of Completion has been submitted, they are required to prepare an addendum to the EPR. The addendum must outline the change, the reasons for the change, the proponent's assessment of any impact the change might have on the environment, proposed measures to mitigate the impact, and a statement as to whether the proponent thinks the change is significant or not. If the proponent determines that the change is significant, they must prepare and publish a Notice of Environmental Project Report Addendum. The process and timelines for both objections from the public and for the minister to act in response to the addendum are basically the same as in the process leading to the original Notice of Completion.

If the proponent does not begin construction of the project within 10 years of submitting a Statement of Completion, they will be required to conduct a review of the project to consider any changes that have

taken place. Such changes might include different environmental conditions at the site, new engineering standards, or new technologies to mitigate negative impacts.

Implications of the Decision

All Sizes of Public Transit Projects are Treated Similarly:

Once a proponent determines that the project in question meets the definition of a "transit project" and falls within the class of projects identified in Schedule 1 of the regulation, they may choose to follow the TPAP regardless of whether the proposed project is large or small, complex or straightforward. Only in very limited circumstances (i.e., the minister has determined that a Revised EPR did not adequately address certain negative impacts) can the minister require a proponent to carry out a Class EA or a full EA under the *EAA*.

TPAP Should Provide a Faster, Easier and less Expensive Alternative:

The TPAP is intended to provide a more streamlined process for transit projects. MOE has stated that the regulation will "ease the regulatory burden on proponents of public transit projects by creating a time-limited, clearly articulated process resulting in more certainty for proponents undertaking public transit projects." Accordingly, the TPAP should help address some of the criticisms of the EA process as they relate to transit projects – i.e., that they are often lengthy and subject to governmental delay. Once a project has been selected, the TPAP dictates strict timelines, and thus should facilitate the development of public transit in the province.

Assumes that Pre-planning Processes are Sufficient and Comprehensive:

The TPAP is premised on an assumption that municipal pre-planning processes, particularly in the area of public consultation, are both sufficient and comprehensive. While not dictating what must be done prior to beginning the process, the TPAP Guide advises proponents to be "well prepared" and suggests that they "should consider involving or consulting with a broad range of potentially interested persons in pre-planning and decision-making leading up to the selection of a transit project." Whether or not such prior consultation is as thorough or transparent as a regular EA process is an open question.

Public Participation & EBR Process

MOE published the regulation proposal notice on March 28, 2008. The proposal notice included a link to the draft regulation. As well, the proposal notice provided a thorough overview of the context for, and the assessment process outlined within, the regulation.

MOE provided a 45-day comment period, between March 28, 2008 and May 12, 2008. The proposal generated a fairly robust response from stakeholders. A total of 35 comments were filed with MOE, with 21 received in writing and 14 received online. A significant number of comments came from municipalities (because they are proponents who will use the TPAP), with the remainder from environmental non-governmental organizations, environmental assessment practitioners, the federal government, the Ontario Chamber of Commerce and members of the general public.

MTO published the policy proposal notice for the Transit Priority Statement on April 3, 2008 and provided a link to the draft statement. The proposal also briefly presented the purpose for the proposed policy. MTO provided a 45-day comment period, between April 3, 2008 and May 18, 2008 and received one written comment.

Along with the extended *EBR* comment periods, MOE and MTO held an information session on April 30, 2008 that was attended by a range of stakeholders. The ministries are to be commended for coordinating their efforts and holding a joint public information session.

Clear Support for Increasing Public Transit:

In general, a majority of the commenters strongly supported the underlying goals of the Transit Priority Statement and the regulation. Most commenters viewed increased public transit infrastructure as highly desirable for environmental and socio-economic reasons, especially within urban areas. As the Canadian

Environmental Law Association (CELA) stated, the "government's intent to facilitate the timely and orderly development of environmentally sustainable modes of public transit across Ontario" is a laudable goal.

Timelines are Unworkable:

Several commenters felt that the various timelines established for consultation, public input and ministerial action are much too restrictive and unreasonable. Some felt the overlap between the consultation process and the drafting of the EPR would result in very limited opportunities for public input to be incorporated. Furthermore, for projects that may be complex, involve aboriginal consultation or have federal importance, these commenters stressed that the truncated approval process would exacerbate this problem, particularly given that there is no provision for the minister to extend the timelines. Some municipalities expressed concern that their own internal municipal processes may operate too slowly to meet the regulatory deadlines.

Clear Timelines Provide Certainty:

In contrast to the above, several municipalities were supportive of the "streamlined" approach. As well, the Ontario Chamber of Commerce supported the regulation on the grounds that it provides greater predictability and certainty that would reduce costly delays for proposed projects. To further limit any possible delays, some suggested that a limit of two months should be applied to provincial interest "timeouts" and that a limit be established as to the number of "timeouts" a proponent should be permitted.

Reduces Opportunities and Extent of Public Consultation:

A significant number of commenters focused on the impact the regulation might have on public participation and consultation. In particular, concerns were raised about the nature, scope and extent of consultations that would occur both prior to and following the start of the assessment process. Many were concerned that comprehensive and transparent public engagement opportunities are not mandated by the regulation. As well, commenters pointed out that municipal planning exercises do not provide public consultation mechanisms that are equivalent to an environmental assessment process. CELA also raised a question as to "whether the government's legal and/or fiduciary duty to consult aboriginal communities (and to accommodate aboriginal concerns) can be simply delegated to the absolute discretion of proponents."

Not only were concerns expressed about consultation processes, but several commenters were concerned about the public's ability to access information about a project both prior to the start of an assessment process and once the process has begun. The regulation stipulates that notice of a project is to be provided to landowners within 30 metres of the project. Two commenters indicated that this was insufficient and one commenter proposed that the notice provisions should be made consistent with *Planning Act* requirements. Other commenters recommended that all notices should be distributed more widely, including posting such notices on MOE's website. In addition, other commenters expressed concerns about the public's ability to access project documentation in a timely fashion. If, for example, proponents do not have such documentation ready until late in the four-month process, the public will have "little review time and no time [will be available] for comments to be taken into account."

Eliminates Certain Core Provisions of the EAA:

Within the *EAA*, a systematic evaluation must be conducted of the "need for" and "alternatives to" public transit in general or of a particular transit project during the pre-planning stages. Although MOE encourages proponents following the TPAP to "continue to carry out recognized best practices in the field of environmental assessment when planning and determining the scale and scope of a transit project," the TPAP does not require proponents to consider either the "need for" or potential "alternatives to" either public transit in general or for the selected transit project. There is no requirement, for example, for a proponent to consider alternative technologies or alternative locations for the transit route. In the view of some commenters, failure to require adherence to these key aspects of environmental assessment may result in court challenges or judicial review.

Grounds for Objecting are Narrow:

Several commenters expressed concerns about the narrow grounds upon which the minister may exercise discretion (i.e., the project has a potential "negative impact" upon a matter of provincial

importance that relates to the natural environment or has cultural heritage value or interest, or on a constitutionally protected aboriginal or treaty right). One commenter pointed out that most transit projects are located in urban areas and so the issues of the greatest concern are typically social and economic in nature. Pursuant to the regulation, the minister is not able to act on concerns such as these. Some municipalities also felt that issues of local or regional importance should trigger ministerial intervention, but these too are not permitted grounds under the regulation.

Approval by Default:

A number of commenters expressed concern that there is no requirement that the minister actually issue a notice to proceed to a proponent once an EPR has been submitted. As well, if the minister does not respond within the specific timeframe (i.e., 65 days after the EPR is first published) the project is automatically approved. In the view of several commenters, it is unacceptable that the regulation has established an "approval by default" system.

Definition of Transit Project Requires Clarification and Expansion:

Some commenters expressed a desire that MOE further clarify the types of projects that may be subject to the regulation. In particular, commenters expressed uncertainty about whether heavy rail or subways were included within its scope. Several municipalities also expressed concern that the definition of "transit project" was too narrow as it excluded the phased implementation of road widening projects from high occupancy vehicle (HOV) lanes to bus rapid transit (BRT). One commenter also suggested that water-based public transit projects also be considered for inclusion as they may potentially have a reduced environmental impact when compared with "hard" infrastructure development.

Changes Made in Response to Comments:

While the broad principles and policy set out in the proposal remained unchanged, MOE did make a number of amendments to the draft regulation in response to comments received during the Registry and other stakeholder consultations, including the following changes:

- The definition of "transit projects" was broadened so that incidental uses such as walking and bicycling will not prevent a proponent from following the process;
- In response to requests for clarity, heavy rail or subways were clearly included within the scope of the regulation;
- Rather than focusing only on the negative impacts of a transit project, all potential impacts, both positive and negative, must be analyzed;
- Clarification was provided about the manner by which a description of pre-planning activities will be made available to interested persons;
- In response to concerns raised about the minister's ability to act, the regulation was revised to allow the minister to act regardless of whether an objection is submitted. In the draft regulation, the minister was only able to act if a valid objection was raised;
- MOE included a "stale date" provision such that proponents will be required to review the project
 if it has not been started within 10 years of the original Statement of Completion; and
- MOE also amended the aboriginal consultation processes.

SEV

In its Statement of Environmental Values (SEV) briefing note, MOE stated that the regulation was consistent with several of the ministry's environmental values. MOE stated that the regulation will result in more quickly developed transit projects, which will have a positive impact on the environment by reducing both overall transportation related emissions and fossil fuel consumption. MOE also stated that there will be a positive impact on social and economic considerations as increased public transportation will lead to reduced congestion on Ontario roads.

Other Information

Over the past decade, provincial, federal and municipal governments have discussed the need for a transit link between Union Station and Pearson International Airport in Toronto – two of the GGH key transportation hubs. Union Station accommodates 40 million passengers per year, while Pearson Airport handles 31.5 million. In 2003, the federal transport minister announced a proposal that would use the rail corridor used by GO Transit, running between Union Station and Georgetown, northwest of Toronto. Upgrades would be required to expand GO commuter capacity, and a 3.3 kilometre rail "spur" would be needed in order to connect the line to the airport. Local opposition was pronounced, particularly in Weston, a Toronto neighbourhood through which the proposed route was to run. Several concerns were raised, including:

- the proposed use of refurbished diesel, rather than cleaner, electric engines;
- the frequency with which the trains would run through several communities without stopping, thus serving business travel needs while providing minimal public transportation benefits;
- the impact that the increased train service would have on social and economic fabric of the Weston community given that the route would require road closures and divide the residential and commercial elements of the neighbourhood; and
- the perceived limited consideration that was given to alternative routes.

In October 2006, GO Transit initiated an Individual Environmental Assessment for the Georgetown South Corridor Service Expansion and Airport Transportation Link between Pearson Airport and Union Station. Terms of Reference for the project were submitted to MOE for formal review. The required EA study, however, never progressed beyond the preliminary stages. In June 2007, the Ontario government announced the MoveOntario 2020 plan which provides funding to improve rapid transit in the GTHA. In November 2008, Metrolinx approved its Regional Transportation Plan, which identified the Pearson Air-Rail link to Union Station as one of the "Top 15 Transit Priorities."

On December 15, 2008, Metrolinx (the former Greater Toronto Transportation Authority) announced it is the new proponent of the expanded Georgetown GO project. The key objective of the overall project, which includes the air-rail link, is to increase service on the GO line to provide all-day, two-way GO service to communities north and west of Toronto. In January 2009, Metrolinx indicated that a revised proposal had been developed and on April 2, 2009 issued a TPAP Notice of Commencement. During the public consultation period that followed, the level of concern expressed by neighbouring residents about the health implications of diesel, rather than electric trains, reached a crescendo.

ECO Comment

The ECO views increased public transit as a highly desirable goal. There are, however, several concerns that the ECO has with the current regulation. One concern is that various components of traditional environmental assessments are removed with the regulation. Section 1(1) of the *EAA* broadly defines environment to include "the social, economic and cultural conditions that influence the life of humans or a community." Within typical EA processes, therefore, these are legitimate grounds to be raised by the public in commenting on proposed projects. However, the Transit Projects Regulation explicitly limits the grounds upon which public concerns will trigger government intervention. This is of significant concern to the ECO as social and economic considerations are often key issues that local citizens raise in opposition to proposed transit projects. It is not unlikely that citizens will find alternative means, such as legal challenges or requests for judicial review, to express their concerns over issues such as these.

A second concern is that the regulation adopts a "one size fits all" approach. The Transit Projects Regulation does not provide a size-based classification system, but rather encompasses all projects within its purview. It makes no distinction between projects based on either their scope or magnitude. Accordingly, large projects such as the Georgetown South Expansion and Union-Pearson Rail Link are subject to the same assessment process as much smaller projects with fewer potential impacts. Unlike the streamlined environmental assessment processes that have been introduced for electricity in 2001 and waste projects in 2007, no "classification" or categorization scheme is included within the TPAP

based on type or size of project or the scale of potential environmental impact. Given that there are various levels of scrutiny associated with each of the categories for waste and electricity, the public has the option of requesting that a particular project be elevated.

Transit projects can be an extremely wise investment in the future. Through careful integration with smart land use planning, such projects can help curb urban sprawl, reduce greenhouse gas emissions, lower toxic vehicle emissions, and help make cities much more liveable and sustainable. Nevertheless, there is an important cautionary note that needs to be added. Not every proposed transit project is going to be a good one, and not all transit projects will be created equally. Individual transit projects must be viewed within the larger context of an enhanced transportation framework. Fundamentally, the goal is not an increase in transit projects, but a substantial increase in transit usage which is accomplished through effective overall transit planning.

Accordingly, while TPAP has removed some key requirements of the EA process, such as the requirement to consider both the "need" for and the potential "alternatives" to a particular project, it is hoped that the planning processes used by all proponents will include these considerations. While the ECO agrees that the requirement to determine "need" is much less relevant given the benefits of increased public transit, a requirement to consider "alternatives" is still in the public interest particularly when various transit options have differing impacts socially, economically and environmentally. A careful weighing of alternatives, with public scrutiny, can lead to better overall outcomes and a wiser use of scarce public resources.

Review of Posted Decision:

4.8 Landfill Gas Collection and Control Regulation

Decision Information:

Registry Number: 010-3086 Comment Period: 30 days
Proposal Posted: April 29, 2008 Number of Comments: 9
Decision Posted: June 26, 2008 Came into Force: June 19, 2008

Description

As organic matter decomposes in landfills, various gases, such as methane (CH_4) and carbon dioxide (CO_2), are produced. Trace levels of hydrogen sulphide and volatile organic compounds are also produced, which may cause odours, degrade air quality and have negative health effects. In a typical landfill, approximately 50 per cent of the produced gas is methane and 50 per cent is CO_2 . Methane and CO_2 are greenhouse gases (GHGs) that contribute to climate change. Of these, methane is of greater concern as it has a global warming potential (GWP) 25 times greater than CO_2 based on a 100 year time horizon. Over a shorter time frame, methane's GWP is much higher and has been calculated by the Intergovernmental Panel on Climate Change to be 72 times greater than CO_2 when calculated over a 20 year time horizon.

In 2007, methane from landfills contributed an estimated 3.6 per cent of Ontario's human-made CO_2 equivalent emissions. Some of these emissions were a result of venting the gas directly to the air. Methane can be captured, however, and either flared or burned to generate electricity. Through flaring or burning, methane is converted into CO_2 , with the consequential great reduction in GWP. Further emissions reductions are achieved if the methane is used to generate electricity as it may offset the burning of coal or natural gas.

In June 2008, new rules came into force under the *Environmental Protection Act (EPA)* that will both increase the number of Ontario landfills required to have landfill gas collection systems in place, as well

as require landfill owners to produce annual reports on landfill gas reductions. The new rules apply to sites that accept municipal waste only. According to government projections, by increasing the number of landfills that are required to capture methane, the new regulations will result in a reduction of over four million tonnes of GHG emissions per year, the equivalent of removing 200,000 cars from the road every year.

Landfill Gas Collection and Control Regulation Amendments:

Ontario Regulation 232/98 – Landfilling Sites, made under the *EPA*, sets out specific requirements related to the operation and management of new or expanding landfills. Prior to the new rules coming into force in June 2008, O. Reg. 232/98 required new or expanding landfills with a waste disposal capacity greater than 3 million cubic metres to capture landfill gases and either flare or burn them to generate electricity. As well, landfill owners were required to report on the design of gas control facilities in place.

In June 2008, O. Reg. 232/98 was amended to require all new or expanding landfills that have a total waste disposal capacity greater than 1.5 million cubic metres to capture and either flare the landfill gas or burn it to generate electricity. For new or expanding sites, collection systems are to be installed following site approval and in accordance with the site's Certificate of Approval (C of A).

At the same time, section 11 of R.R.O. 1990, Reg. 347 (the general waste management regulation), made under the *EPA*, was amended to include landfill gas reduction reporting requirements for operating landfills. Pursuant to the amendments made in June 2008, all operating landfills with a waste disposal capacity greater than 1.5 million cubic metres are now required to submit a report outlining the design of any gas collection system in place, and any possible improvement that can be made to increase the amount of landfill gas generated, by June 30, 2009. If required, a collection system must then be installed by December 31, 2010.

Beginning in 2010, annual reports must be filed with the Ministry of the Environment (MOE). These reports must indicate the volume of landfill gas collected by the facility during the year, the percentage of gas that was methane and how much methane was reduced either through flaring or burned for power generation. Reports containing 2009 information must be filed by June 1, 2010 and then annually thereafter. If the owner of a landfill can show that the nature and quantity of gas generated at a particular site is not likely to be of significant concern (based on site characteristics, the type of waste to be deposited and the rate at which waste is deposited), the landfill may be exempted from gas control and reporting requirements. The regulations explicitly state that they do not apply to forest industry landfills or coal ash landfills.

To assist smaller municipalities in paying for the associated capital costs of setting up collection systems, about \$10 million in funding support was allocated. In order to be eligible for funding, municipalities were required to have a population below 250,000 persons and operate a landfill with either less than three million cubic metres of total capacity or less than 1.5 million cubic metres of remaining capacity. Funding applications were to be submitted by November 7, 2008 and in April 2009, MOE announced that six landfills will receive funding support.

Organic Diversion Efforts:

Organic waste, which is produced by households, businesses and other institutions, makes up as much as one-third of the waste stream in Ontario and is the major source of methane production in landfills. Significant gains have been made by municipalities in diverting household organics (including leaf and yard waste) from landfills either through backyard composting programs, or curbside or depot collection. The overall volume of organics diverted from landfills through these efforts increased 86 per cent between 2002 and 2007 from 359,572 to 668,636 tonnes. The situation with regard to diverting organic waste from the industrial, commercial and institutional sectors, however, has been less successful.

The provincial government recognizes the importance of such diversion efforts. In 2004, it established a goal to divert 60 per cent of Ontario's overall waste from disposal by the end of 2008, and renewed these efforts in October 2008 by releasing a discussion paper on the province's *Waste Diversion Act, 2002* for public comment.

Implications of the Decision

A key implication of this decision is that it sends a contradictory message to municipalities with regard to organic waste. On the one hand, the provincial government is working to decrease the amount of organic material entering landfills by promoting increased diversion programs. On the other, through these regulatory amendments, some municipalities will be required to spend a significant amount of money implementing landfill gas capture systems. In an effort to offset costs, municipalities may decide to use the gas to generate electricity, which can be sold to the provincial grid. A tension may develop, therefore, between a municipality's need for organics to feed its landfill gas collection system to generate electricity, versus increased organic diversion efforts. If diversion ultimately proves successful, a long-term implication might be the elimination of the revenue stream for electricity generation facilities.

Public Participation & EBR Process

MOE published its first regulation proposal notice on August 9, 2007 ($\it EBR$ Registry Number 010-0968). The proposal notice explained the role that methane and $\it CO_2$ play in climate change and outlined the requirements of O. Reg. 232/98 in terms of capturing these gases. MOE did not provide draft regulations with this posting, but rather outlined the conceptual changes that it was proposing. MOE provided a 90-day comment period which ended November 7, 2007. Sixteen comments were received in response to the proposal. Several of the comments received were from waste management organizations, with the remainder coming from municipalities and individuals. There was almost unanimous support for the underlying goal of reducing greenhouse gas emissions by capturing landfill gases, however some concerns were expressed with the proposed approach.

Of key concern to most of the municipal commenters was the impact that the proposed changes would have on the ability of landfill operators to participate in greenhouse gas emissions trading programs. Under such programs, trading eligibility is generally based upon the claim that the greenhouse gas reductions are a result of a voluntary measure. If so, they are deemed to be "surplus" and the operator is eligible to participate in both the current voluntary and any future regulated emission trading systems. Concern was expressed, therefore, that making gas collection systems mandatory would eliminate the ability of landfill operators to participate in the trading programs and sell the reductions as offsets. This could represent a significant source of revenue for municipalities. According to calculations by the City of London, its future annual emissions credits could range in value between \$300,000 and \$1,300,000 which could be used to offset the cost of installing the required systems. Several of the commenters proposed that operating landfills that have gas control measures already in place be exempt from the proposed regulations, while others proposed that alternatives outside of a regulatory framework be explored that would continue to allow monetizing emission reductions.

A second concern related to the cost of implementing the required collection systems, particularly where retrofits are required. Several commenters stated that financial support should be provided to municipalities given the limited options they have to generate funding to install such systems. Both the Municipal Waste Integration Network (MWIN) and the Ontario Waste Management Association (OWMA) expressed a concern that, in the absence of funding assistance, some landfills may close prematurely in order to avoid the costs associated with implementing capture systems. OWMA recommended that MOE make available a list of landfill facilities that would be potentially captured by the proposed regulation and that an assessment be conducted to determine which landfills might close prematurely as a result of the costs involved in complying with the regulation.

Some commenters indicated that the proposed implementation date of January 1, 2009, was unrealistic given the need to have engineering studies and gas system designs completed for each of the landfills that would be captured by the regulations. Quebec adopted a similar requirement following a three-year implementation period and so it was argued by some commenters that a similar timeframe should be followed in Ontario.

A small number of commenters advised that the proposed regulations need to be framed within a larger comprehensive strategy for dealing with waste. In particular, commenters argued that the regulations

represented an "end-of-pipe" solution, and that more focus should be placed on waste diversion and reduction. Accordingly, the province was encouraged to provide additional support to municipalities for these activities.

Several commenters also suggested that objective and quantitative performance criteria are needed and should be provided in order to determine the adequacy of existing and proposed gas collection systems. As well, some felt that clear guidelines were necessary so operators would have a better understanding of what they would need to demonstrate in order for their sites to be exempt from gas controls requirements.

Only one commenter raised concerns regarding the amount of methane gas that might be captured through landfill gas systems and questioned some of the underlying assumptions around the efficiency of such systems. In particular, the commenter argued that only 30-35 per cent of the gas is actually recovered and that, in order to effectively produce electricity, "a constant supply of fresh garbage with sufficient organic composition must be continually introduced, otherwise the gas curve...will eventually taper off to zero." As such, the commenter raised questions around the cost implications of building a facility to capture and generate electricity from a landfill that may have a relatively short life span.

On April 29, 2008, MOE revised and posted a second regulation proposal notice on the same subject. Unlike the first posting, this second proposal notice provided more detail and included a link to the two draft regulations. As well, the notice outlined some of the concerns that had been raised by commenters in response to the August 2007 notice and explained how several of these concerns had been addressed in the draft regulations. In particular, the issue of GHG reduction credits was addressed and the proposed regulations were amended to recognize early action taken by landfill operators. In particular, landfills that have collection systems in place prior to June 30, 2009, were granted a seven-year grace period until June 30, 2016, before they must submit a report outlining the status of their collection system. This early action exception thereby allows voluntary emission reductions to be considered as 'offsets' eliqible to be sold until 2016.

As well, the second proposal notice extended by six months, to June 30, 2009, the time frame required for operating landfills to submit their design plans. These landfills will then be required to have gas collection systems in place by December 31, 2010. Finally, coal ash landfills were specifically exempted from the regulations in response to a comment that such landfills do not generate significant volumes of landfill gas.

There were several other comments that did not result in changes to the proposed regulations and MOE clearly articulated its reasons for not incorporating them. In particular, MOE believed that a comprehensive review of waste management would not affect the need to move ahead with capturing landfill gases. As well, MOE noted that the question of providing financial assistance for municipalities to comply with the changes was beyond the scope of the regulations. MOE also stated that the development of more specific performance criteria would be difficult given the range of site-specific factors such as the type of waste deposited, moisture content, landfill design and fill rate. Finally, MOE stated that it did not believe that landfills would close early in order to avoid the costs associated with implementing new landfill capture systems.

A 30-day comment period was provided for the second regulation proposal notice and nine comments were received in response. Several of the comments repeated those which were made following the initial regulation notice. Of continued concern was the ability of municipalities to finance landfill capture systems without provincial assistance, as well as the eligibility of municipalities to participate in future carbon trading programs. Again, commenters stated that any voluntary action taken to control landfill gas should be kept eligible for participation in future federal or international GHG trading programs. One commenter questioned why MOE had set the site capacity threshold at 1.5 million cubic metres and wanted to know how many sites would be captured by the change.

While a decision notice was posted on June 26, 2008, outlining the changes to the two regulations pursuant to the second proposal notice, as of June 2009 no decision notice had been posted on the Registry for the initial August 2007 posting.

SEV

MOE provided a briefing note explaining how the regulatory amendments are consistent with several of the ministry's SEV principles. MOE stated that reducing methane gas from landfills is consistent with an ecosystem approach to environmental protection as it will play a key role in reducing the province's greenhouse gas emissions and meeting its climate change targets. Other substances contained within landfill gas, which have an impact on local environments, such as hydrogen sulphide, will also be captured and reduced. By using the methane to generate electricity, and thereby offset other fossil-based energy sources, such as natural gas or coal, MOE states that the regulations will assist with the goal of resource conservation.

Other Information

Factors Affecting Methane Production in Landfills:

The process by which organic materials decompose in a sealed landfill is anaerobic (i.e., occurring in the absence or near-absence of oxygen) and driven by anaerobic bacteria. The latter consume the organic component of the waste, creating methane gas in the process. The rate at which bacteria decompose organic waste in landfills depends primarily upon three factors: the amount of organic waste (food for the microbes) relative to other types of waste; the temperature (these microbes need temperatures above 15°C to operate efficiently); and the moisture content (levels of 40 per cent or higher produce optimal activity). For most large municipal landfills, the ratio of organic materials is fairly high and consistent and the temperature is usually stable and in a range that facilitates bacterial activity, so moisture content becomes the key factor. The more moisture contained in the buried waste, the faster the decomposition proceeds. Moreover, moisture that comes in through a permeable landfill cap accelerates the decomposition rate. Therefore, landfill design and operation affect the rate of decomposition by controlling the amount of moisture that enters the landfill on an on-going basis.

Landfills that attempt to keep all moisture out of the waste are called "dry tomb" facilities. These use impermeable caps, which are constructed of thick layers of clay topped by a specially designed liner, covered by drainage material and soil. This design is more common in the United States. Other landfill designs attempt to limit the amount of water that enters the landfill through the placement of a permeable cap after a prescribed period of time. The cap, which generally consists of a layer of soil of prescribed depth, allows a certain amount of water to seep in annually (the total amount will depend on annual levels of precipitation). These "wet" landfills are typical in Ontario.

Using a "wet" landfill design means that landfill gas is generated earlier and in greater volumes than with "dry tomb" facilities. If the gas is not captured and either flared, burned for heat, or burned to generate electricity, it will be released to the atmosphere, with serious negative climate-change impacts. However, these greater volumes also make the generation of energy from the combustion of methane feasible.

Energy Production from Landfill Gas:

As indicated above, landfill gas can be burned to generate electricity; however, both the gas volume and its methane concentration must be high enough to make this process work efficiently. Some of Ontario's municipal solid waste landfills, with their wet design, may generate enough landfill gas with high enough methane concentrations to make energy production worthwhile. The gas is collected by means of a system of vertical plastic perforated pipes inserted into the landfill at regular intervals. Horizontal header pipes collect the gas and deliver it to the site where the power is generated, usually by means of an engine or turbine paired with an electrical generator. This electrical power is then fed into the power utility's grid.

Are landfill gas collection systems as effective as we believe?

The efficiency of landfill gas collection systems depends upon a variety of factors, such as the placement of the pipes and the permeability of the containment materials around the landfill. Accordingly, the methane capture rate can be as low as 20 per cent or as high as 90 per cent. Any gas not captured by the system is eventually released to the atmosphere. The need to create higher methane generation rates (in order to make a system viable) could result in landfills designed to be wetter, simply because wetter material decomposes more quickly. Depending on the actual capture efficiency, higher fugitive-methane emission rates resulting from wetter landfills could reduce, offset or even exceed the potential environmental gains from landfill-gas capture and power generation.

ECO Comment

The ECO firmly believes that the best solution to deal with GHGs from landfills is to reduce or ideally eliminate, on a go-forward basis, the amount of organic matter that ends up in landfills. Not only would organics diversion help reduce GHG emissions, but it would also result in other environmental co-benefits such as mitigating odours, preserving valuable green space and maintaining air, soil and water quality. The ECO is pleased to see that significant gains have been made by municipalities in diverting organic waste, but is concerned that the provincial government has not established a comprehensive plan to assist with future diversion efforts. The ECO therefore welcomes the review of the *Waste Diversion Act, 2002*, and notes that MOE is reviewing opportunities to facilitate "the development of more organic waste diversion programs and processing capacity in the province, as well as encourage the composting of more materials...in an environmentally sustainable manner." While the ECO clearly supports aggressive diversion programs, it is hoped that such programs will be structured within the context of an overall solid waste management strategy.

The ECO is somewhat concerned about the conflicting messages that municipalities may be receiving from the provincial government with regard to organic waste. As indicated above, while the government is promoting increased diversion programs, these regulatory amendments may result in a situation where municipalities need to continue landfilling organic matter in order to 'feed' costly collection systems.

The ECO recognizes that zero waste is not achievable in the near future, however, and therefore supports all efforts to minimize the environmental damage caused by current and legacy waste disposal practices. While initiatives to capture these gases are supported, the ECO believes that some questions remain outstanding with regard to the overall environmental efficacy of current landfill gas capture systems when methane production is accelerated.

The ECO finds it surprising that MOE provided no information regarding the specific number of landfills that would be affected by the regulatory changes. While the initial proposal notice indicated that "a number of larger closed or operating landfills currently have landfill gas controls in place", no indication was provided as to either how many already have such systems, or how many more would be captured by these changes. In the past, the ECO has raised concerns regarding gaps in the provincial framework for monitoring and regulating Ontario landfills and has urged MOE to update its 1991 Inventory of Waste Disposal Sites and make it readily accessible to the public. MOE has informed the ECO that while it has developed and implemented a detailed, online inventory of Ontario's 32 largest active landfills, it is only available on MOE's intranet. At a minimum, MOE should make available a list of landfill facilities that would be subject to the new regulations. Not only is such a list required in order to determine the current status of landfills in Ontario, but also to have some basis for understanding and evaluating the potential greenhouse gas reductions that have been projected by MOE.

Finally, the regulations require additional reporting by landfill operators and, ostensibly, additional monitoring of landfill performance by MOE. As has been expressed in the past, the ECO has concerns about the ability of MOE to monitor additional reports. Along with a lack of staff and financial resources required to develop the electronic inventory outlined above, MOE has indicated to the ECO in previous years that it lacks the capacity to continuously audit information provided by landfill owners.

Review of Posted Decision:

4.9 MNR Policy on the Importation of Inert Fill for the Purpose of Rehabilitation

Decision Information:

Registry Number: 010-2505 Comment Period: 45 days Proposal Posted: January 25, 2008 Number of Comments: 15

Decision Posted: May 26, 2008 Decision Implemented: April 14, 2008

Description

The Ministry of Natural Resources (MNR) is the administrator of a manual called the Aggregate Resources Program Policies and Procedures Manual ("the Manual"). The Manual is intended for use by MNR staff who administer the *Aggregate Resources Act (ARA)* and its regulations, standards and policies. One of the Manual's policies, Policy A.R. 6.00.03 – Importation of Inert Fill for the Purpose of Rehabilitation ("the policy"), was the subject of a policy proposal posting on the Environmental Registry in January 2008, and a decision posting in May 2008. The policy, like other policies in the Manual, has regulatory authority and is enforceable by MNR.

"Inert Fill" is defined in R.R.O. 1990, Reg. 347 made under the *Environmental Protection Act (EPA)* as "earth or rock fill or waste of a similar nature that contains no putrescible materials or soluble or decomposable chemical substances."

MNR's policy, prior to April 2008, required that inert fill meet the standards in Table 1 of the "Soil, Ground Water and Sediment Standards for Use under Part XV.1 of the Environment Protection Act" dated March 9, 2004 (the "Standards Document"). The Standards Document is administered by the Ministry of the Environment (MOE) and has force under O. Reg. 153/04 (Records of Site Conditions – Part XV.1 of the Act) made under Part XV.1 (Records of Site Condition) of the *EPA*. This regulation came into effect on October 1, 2004, and details the requirements that property owners must meet in order to file a record of site condition (RSC).

Filing an RSC on the province's Environmental Site Registry provides property owners protection from some environmental cleanup orders. In order to file an RSC, the property must have been properly assessed and shown to meet the appropriate soil, sediment and groundwater criteria in MOE's Standards Document for the use proposed to take place on the property.

In January 2008, MNR proposed that imported fill used for the purposes of rehabilitating pits and quarries in the subsurface soil zone, i.e., greater than 1.5 metres below ground surface, be exempt from the requirement to meet the standard for sodium adsorption ratio (SAR) and electrical conductivity (EC) defined in Table 1 or any other table in MOE's Standards Document. MNR noted that it had consulted with MOE on this proposal. The rationale cited by MNR was that the SAR and EC criteria are intended to ensure good plant growth, and plant growth is primarily affected by the conditions of the surface soil. Therefore, imported fill being deposited at a depth greater than 1.5 metres below ground surface should not be required to meet these two standards.

Soil, Ground Water and Sediment Standards for Use under EPA Part XV.1:

Table 1 of the Standards Document sets out the standards that would be used by contractors or pit and quarry operators to determine if soils qualify as inert fill for subsurface rehabilitation at pits and quarries. MOE indicated that these standards are considered representative of upper limits of typical province-wide background concentrations in soils that are not contaminated by point sources. The Standards Document includes six tables, each of which specifies maximum acceptable values for approximately 120 contaminants (e.g., metals such as mercury and nickel; petroleum hydrocarbons; pesticides; and plasticizing agents) for soil and groundwater according to differing site conditions, e.g., depth of soil placement, potability of groundwater beneath the site. The tables also specify maximum acceptable values according to differing property uses, e.g., agricultural or residential.

Relevance of Sodium Adsorption Ratio and Electrical Conductivity:

The standards SAR and EC can be used to assess the potential of a soil to exhibit soil particle dispersion, an undesirable characteristic of soils particularly for plant growth. Soil particles are held together primarily by calcium and magnesium, a term known as "flocculation." In a chemically well-balanced soil, soil particles remain aggregated, allowing plant roots to penetrate. In soils high in sodium, soil particle dispersion can occur, hindering proper soil structure and root penetration.

Sodium adsorption ratio is a ratio of sodium ions (a detrimental element) to the combination of calcium and magnesium ions (beneficial elements). Electrical conductivity can be used to measure a soil's salinity and other soil properties. Salinity affects the suitability of a soil for crop production, as well as the stability of soil if it is used as construction material, and the potential of the soil to corrode metal and concrete. SAR and EC are used primarily in the assessment of agricultural soils or surface areas to be vegetated, like parkland where healthy plant growth is expected.

Implementation of Revised Policy A.R. 6.00.03:

In the revised policy, MNR provided several means to ensure the policy could be applied in a number of different situations, e.g., to accommodate older and newer approved pits and quarries, and those with differing rehabilitation needs and site plan conditions. In three situations specified in the policy, a minor site plan amendment is required and in one situation, a major site plan amendment is required.

MNR also provided two examples of wording that could be used by pit and quarry operators who wish to make site plan condition amendments. The first example includes the condition that "At the request of MNR, the licensee/permittee will conduct random sampling of the imported material" to ensure the material meets the Table 1 standards and that sample results will be provided to MNR upon request. The second example includes the condition that the "licensee/permittee must ensure that the material is tested at the source..." to ensure the material meets the Table 1 standards. Both examples of wording went on to include that the SAR and EC criteria do not have to be met.

MNR's policy states that "alternative criteria may be acceptable on a case-by-case basis with prior approval." This wording was added to accommodate those instances where soils have a higher concentration of a contaminant than permitted under Table 1, but a lower concentration than is found in the background level of soils on-site at the pit or quarry. In this instance, MOE approval can be sought to use the soil for rehabilitation.

Implications of the Decision

MNR's revised policy should lead to more pits and quarries accepting, for subsurface rehabilitation, construction project soils that were previously refused on the basis that they did not meet the standards for SAR and EC.

Soils obtained from construction projects under or adjacent to road beds may well contain de-icing substances, chiefly sodium chloride or road salt. These soils could also contain traces of many different substances used by road vehicles including anti-freeze, windshield cleaning fluids, brake fluids, engine oil and petroleum hydrocarbons, to name a few. Without testing these soils for contaminants, their use for pit and quarry rehabilitation could lead to groundwater contamination. Aggregate extraction at pits and

quarries in Ontario frequently involves excavation activities close to the water table. Sodium chloride is highly soluble in water, and therefore residual salts in soils could leach into nearby aquifers or surface water. Obtaining test results from construction contractors or site operators, and periodic spot-checks and audits of these results by MOE and MNR will be critical to preventing unintended site contamination. The need for approval from MOE to use soils which may not meet certain standards in Table 1 for rehabilitation purposes, will also be critically important to preventing soil and water resource contamination in and around rehabilitated pits and quarries.

There is an economic impact to this policy decision, though the precise impact is difficult to estimate. The most probable alternative fate for soils that exceed the Table 1 standards would be to dispose of these soils at landfills in Ontario. The Ontario Road Builders Association (ORBA) estimates that road projects generate roughly 13 million tonnes of excavated soils each year. The Association has estimated that Ontario construction companies could collectively face a \$700 million disposal cost if all excavated soils need to be disposed of at landfills instead of being used in the rehabilitation of pits and quarries. ORBA also noted that trucks delivering aggregate frequently remove excavated soils for rehabilitation at pits and quarries. If soils need to be sent to landfill, then in all likelihood greater haulage costs and air emissions will result. MNR's new policy should partially alleviate these concerns. However, MNR did not elaborate on how extensively the former policy had been enforced, or what quantities of soil have been landfilled in recent years, or what costs actually have been incurred by industry. This information would have been very useful, to help the public understand the implications of this decision.

Public Participation & EBR Process

MNR described the effect of consultation on this decision in the following manner. The comments were generally supportive of the proposal. Some suggestions for changes were provided and were put into effect. For example, the sample site plan wording was amended to incorporate both pit and quarry rehabilitation, as the term "quarry" was omitted from the original proposal. The majority of the comments also requested further clarification of the ministry's position on alternatives to Table 1 criteria. The ministry explained that alternative criteria may be acceptable on a "case by case basis with prior approval."

Additional comments were received expressing concerns with the soil quality standards specified in Tables 1 and 2 of the Standards Document, including applying the same rationale to other soil standards (e.g., boron, zinc, copper) where the concern is ecotoxicity. MNR responded that it has no legislative role with respect to the *EPA* and does not establish the requirements of Tables 1 or 2, and so comments of this nature were deemed to be outside of the scope of MNR's policy revisions.

The ECO reviewed the comments received on this proposal and noted that the majority of the commenters supported MNR's proposed direction, while a few commenters did not support the amendments on the basis that MNR did not go far enough in easing soil acceptability restrictions. Ten of the comments were form-letter based, essentially stating the same issues. Five of the comments were unique in nature. The form-letter comments included:

- Agreement with MNR's proposal to exclude any SAR or EC standards for soil being deposited at a depth of 1.5 metres or greater, and agreement that this is a reasonable and environmentally acceptable position as MOE concurs with the amendment;
- Suggested wording for soils that are "cleaner" than background soils at an aggregate site, i.e., that "alternative criteria may be acceptable on a case by case basis." MNR adopted this suggestion, but added the condition of "with prior approval" of MOE;
- Support for MNR's attempt to be flexible in allowing different types of fill to be used, with the
 proviso that more definitive language is required, especially for the excess materials that arise
 from construction projects;
- A request that MNR make it clear whether the intention of the amended policy is to allow the
 acceptance of materials that meet background levels found at a given site; and
- The suggestion that MNR undertake a more comprehensive evaluation of its policy, i.e., one which would consider a review of more than the SAR and EC standards.

A commenter representing sewer and water main construction interests wrote that the soils that are excavated in these projects are usually unsuitable for re-use in such projects. In the past, these soils were routinely accepted at pits and quarries, but beginning in 1997 with amendments to regulations under the *ARA*, these soils began to be refused at pits and quarries. Since sewer and water mains are frequently located near roads and highways, excavated materials from these projects have been refused for use at pit and quarry sites, usually because of the residual salt concentrations from road de-icing activities. This commenter supported the direction of the MNR's policy proposal as it would restore the ability of a number of pits and quarries to receive this industry's excavated materials. The policy proposal was regarded as sensible as it recognized that road salt is a less significant environmental concern than contaminants like chromium, lead and PCBs (which are covered by the Standards Document).

Another commenter did not support MNR's proposal because the amendments were not substantial enough. The standards in Table 1 were established some time ago and based on data from a limited study and geographic area. Also, according to the commenter, the application of the different tables of standards seemed contradictory, e.g., soils that would meet residential and parkland standards would not be allowed for use in rehabilitating pits and quarries. The commenter supported the use of Table 2 of the Standards Document for determining inert fill quality.

Several commenters noted the concern that if the Table 1 standards are applied too rigorously then soils that cannot be accepted at pit and quarry sites will instead have to be deposited at landfills. This has the potential of imposing higher costs on projects because of landfill tipping fees and will result in consuming a large amount of landfill capacity in the province (unless the soils could be used for landfill cover).

One commenter suggested wording changes about the grading of rehabilitated sites described in the site plan conditions component of the policy. MNR accepted these changes. In summary, MNR was generally attentive to the points raised by commenters and modified the proposal to reflect some of the points raised.

The ECO noted that MNR's policy revision process and Environmental Registry postings lacked detail and clarity in some key ways which undermined transparency and accountability. For example:

- The public could be confused by the way in which this policy takes effect. Effectively, a policy in MNR's ARA Manual creates an exemption for two standards in MOE's Standards Document. However, a review of the Standards Document, in isolation, would not provide this information, as there is no reference to this exemption in the MOE document. This reduces the transparency of the policy's implementation.
- The final version of the policy posted on the Environmental Registry is stamped "draft" on both pages. This creates confusion for any stakeholder or member of the public attempting to determine the status of this policy. MNR acknowledged that this was likely an oversight, but as of December 2008 had not corrected the problem.
- MNR could have been clearer in its description of the proposal and decision. The ministry
 described its proposal as providing "background information" on SAR and EC rather than clearly
 stating it would not require that these two standards be met for soils used for pit and quarry
 rehabilitation in the subsurface zone. Generally, neither the proposal nor decision notice was
 very clear about the amendments to MNR's ARA Manual policy.

SEV

In December 2007, MNR reviewed its Statement of Environment Values (SEV) in formulating this policy proposal. MNR's SEV briefing note for this policy proposal lists statements from its SEV which the ministry considered as consistent with certain ministry and *EBR* objectives. For example, MNR noted that the policy is compatible with the policy principles set out in Directions '90s (an MNR document first released in the early 1990s) and that posting this proposal to amend Policy A.R. 6.00.03 is consistent with provisions of the *EBR* that ensure that environmental decision-making by the Government of Ontario is open and transparent.

MNR noted that nothing in this proposal conflicts with any provisions or commitments set out in MNR's SEV, making reference to some of its SEV statements. For example, MNR noted that the restoration and rehabilitation of degraded environments is recognized as having an important role in securing healthy ecosystems. MNR, however, also noted that there may be cases where past damage is such that full restoration and extensive rehabilitation may not be biologically or economically feasible.

Other Information

The ECO has been actively monitoring the regulation of aggregate operations over the past five years for a variety of reasons. The ECO has received a large number of telephone calls and correspondence about aggregate operations, ranging from concerns about dust and noise during operations to concerns over how or whether former aggregate sites have been rehabilitated. The ECO has also received a number of comprehensive applications for review of the need for a new policy, review of an existing policy governing aggregate operation, and the need for investigation of specific aggregate sites.

For more on the environmental impacts of aggregate extraction in southern Ontario and a review of MNR's revised *ARA* Manual, see pages 44-51 and 113-118 of our 2006/2007 Annual Report. See pages 139-144 of our 2006/2007 Annual Report for a review of pit and guarry rehabilitation in Ontario.

The ECO has also regularly encountered issues involving the impacts of road salts and de-icing agents on vegetation, aquatic habitats and water wells through ongoing research, applications, calls from the public and correspondence (for example, see pages 136-139 of our 2006/2007 Annual Report). The ECO has reviewed the province's brownfield legislation and associated regulations, most recently in our 2007/2008 Annual Report (see pages 111-115) which includes a discussion of record of site conditions issues.

In March 2007, MOE posted a proposal notice (see *EBR* Registry Number 010-0149) on the Registry to amend O. Reg. 153/04 and revise the Standards Document. The basis for the proposal was that "[t]here is now a need to review the standards setting models and criteria and update them with current science." The proposed revised Standards Document sets out standards in ten tables using the same conditions as the 2004 Standards Document, but also specifies standards according to soil texture, i.e., coarse, medium and fine, for Tables 2 through 5. As well, the values of some standards have changed, i.e., some have become more stringent, some less, some have stayed the same, and in some cases standards now exist for contaminants where no value previously existed. As of December 2008, MOE's Standards Document remained a proposal on the Registry. MOE has proposed that the revised standards would come into force 18 months following finalization of the amendments to O. Reg 153/04.

ECO Comment

From a process perspective, the ECO notes that the essence of this policy revision was not very clearly explained in MNR's proposal and decision notices, nor in the actual policy. Further, the means by which this policy takes effect could confuse a member of the public tracking this issue. MNR could have explained the policy proposal and its purpose more clearly, and provided better background information such as what quantities of soil have been landfilled, and what costs actually have been incurred by industry in recent years. This information would have improved the goals of transparency and accountability of decision-making through *EBR* consultation.

The ECO recognizes that the use of construction project excavation soils for pit and quarry rehabilitation poses some level of risk that contaminants in soils could come in contact with groundwater, potentially leading to contamination. Obtaining test results from construction contractors or site operators, and periodic spot-checks and audits of these results by MOE and MNR will be critical to preventing unintended site contamination. The need for approval from MOE to use soils which may not meet certain standards in Table 1 for rehabilitation purposes will also be critically important to preventing soil and water resource contamination in and around rehabilitated pits and quarries.

Soils used for pit and quarry rehabilitation in the subsurface zone will not need to meet the relatively stringent SAR and EC standards, but these soils will not entirely escape from being tested for road salt contamination. MOE's 2004 Standards Document includes a standard for sodium, and the proposed 2007 Standards Document includes standards for both sodium and chloride (albeit relatively lenient standards). Furthermore, the depth at which these soils are placed should mean that plants like shrubs and grasses will not be affected, as their root penetration is not likely to exceed the depth of 1.5 metres. Tree roots could easily exceed this depth, however.

MNR included in its policy the potential for alternative criteria to be applied, "on a case-by-case basis with prior approval," i.e., certain contaminant levels in Table 1 could be allowed to be exceeded in specific instances. This wording was added to accommodate those situations where soils have a higher level of a contaminant than specified in Table 1, but a lower level than the background level of soils on-site at the pit or quarry. The ECO believes that this provision for flexibility on EC and SAR is reasonable but cautions that MOE and MNR need to be judicious in the use of "alternative criteria" in order to avoid the application of this provision to many other contaminants. This could potentially lead to certain sites repeatedly receiving soils with contaminant levels exceeding the standards, because these sites have existing background levels of contamination that exceed the standards.

Without this policy amendment, some volumes of soils would continue to be sent to landfill rather than for pit and quarry rehabilitation. The basis for sending these soils to landfill, i.e., that the soils were exceeding the standards for SAR and EC, is not valid for soils, if used in the subsurface zone. Continuing to landfill these soils could affect both the province's landfill capacity and the cost of many construction projects because of landfill tipping fees. The revised policy should result in reduced haulage costs and air emissions by eliminating the separate trips needed to haul excavated soils to landfill, by instead allowing the hauling of soil back to the pit or quarry which produced the aggregate for a given construction project. Overall, the revised policy seems to strike an appropriate balance between resource use, environmental protection and cost of construction-related soil excavation.

Review of Posted Decision:

4.10 Ontario's Forest Biofibre Policy

Decision Information:

Registry Number: 010-0167 Comment Period: 120 days Proposal Posted: March 27, 2007 Number of Comments: 23

Decision Posted: August 13, 2008 Decision Implemented: August 13, 2008

Description

The Ministry of Natural Resources (MNR) has adopted a policy to guide the allocation, pricing, and use of forest *biofibre*. It defines biofibre as "forest resources from Crown forests that are not normally being utilized for conventional forest products" and includes "tree tops, cull trees or portions of trees, individual and stands of unmerchantable and unmarketable trees, and trees that may be salvaged as a result of a natural disturbance." The ministry's definition states explicitly that mill waste is not included.

The main goals of the policy are to reduce Ontario's dependency on fossil fuels and to diversify and strengthen Ontario's economy. This would be accomplished by promoting biofibre's use as a fuel, both directly as wood pellets, and also by the promotion of new, value-added end uses for the materials (including liquid fuels) derived from the biofibre. MNR maintains that the regulatory and policy framework currently in place is sufficient to ensure the sustainability of the forests under the new policy. This framework is based on the *Crown Forest Sustainability Act, 1994 (CFSA)*, broadly directed by *Declaration Order MNR-71 regarding MNR's Class EA Approval for Forest Management on Crown Lands*, and implemented through individual Forest Management Plans and a supporting set of five technical Guides.

The policy also sets out some guidelines with respect to resource allocation, beginning with a reference to the appropriate authority. Allocation of the biofibre resource is covered under the *CFSA*, section 24, which states that the ministry can conduct: a competitive process; a regulated process authorized by Cabinet; or, a process required by a supply agreement or forest resource licence. The policy states that the preferred process for allocation in this case will be either a competitive process or a regulated process, and that the latter may take the form of a direct allocation of the resource. The policy also states that the criteria to be developed to assist in evaluating proposals will give more weight to projects that provide potential benefits to Aboriginal communities and that proposals from Aboriginal proponents that provide these benefits will be given a higher priority.

To access this biofibre resource, proponents must have a Forest Resource Processing Facility Licence and must provide MNR with a business plan for their processing facility. The ministry must also be able to determine that the amount of resource actually available is sufficient to satisfy the proponent's business plan. The ministry states that it recognizes that new technologies are developing rapidly and that new opportunities to exploit this resource, such as biofuels and other bio-products, may arise in the near future. The policy states that allocation decisions may include reserving some areas or volumes of forest biofibre in order to be able to respond to future opportunities for Aboriginal peoples and/or for value-added bio-products. Pricing will be in accordance with existing policy but will be adjusted in such a way as to promote the development of new products. The policy will be reviewed every five years.

Implications of the Decision

The biofibre policy raises concerns in three broad areas: first, the extent and level of certainty of the assumed climate-change benefit; second, the extent of the increase in forest harvesting and residue removal and how these might effect the forests' biodiversity and sustainability; and third, the lack of detail on the resource-allocation process and how that might affect the development of value-added end uses for the resource. These three concerns are discussed in more detail below.

Climate Change:

From a climate-change perspective, the main benefit of using wood fibre to produce energy is the substitution of renewable fuels for fossil fuels. The term often used to describe renewable fuels such as forest biofibre is "carbon neutral", which means that the net increase of carbon to the atmosphere is zero. In essence, fossil fuels release "old" carbon, which has been stored underground for millions of years, into the atmosphere; alternatively, biomass fuels release carbon dioxide (CO₂) that was only recently sequestered by the trees and will be taken up again by the trees that grow to replace the harvested ones. Thus, using biomass for fuel provides a reduction in greenhouse gases released to the atmosphere from carbon stored underground while at the same time providing a permanent energy-generating system that is "carbon neutral", so that our energy production is no longer a net source of additional atmospheric carbon.

From a climate-change perspective and over the longer term, burning biomass for energy is superior to burning fossil fuels; in the short-to-medium term, however, the benefits may not be as positive and straightforward as is generally assumed. A study on the net effect of forest harvest on CO_2 emissions to the atmosphere found that the time-lag involved in the forest's regeneration and consequent uptake of the CO_2 released during the combustion of the biofibre is such that a substantial, short-to-medium term "debit" is incurred. In other words, the CO_2 will be taken up by new growth, but only gradually, so that the full amount released is not re-sequestered for a considerable period of time. The carbon debit from this scale of forest-harvest increase could be substantial in the short term.

This is not the case when the wood harvested is used to make products with long lives, such as furniture and houses. This concern may be significant, however, with respect to the proposed use of "unmerchantable and unmarketable" trees for fuel. By providing an economic incentive for forest companies to move into areas that were previously considered uneconomic, the ministry's biofibre policy will almost certainly increase, perhaps substantially, the percentage of the annual allowable cut that is harvested each year. This material will probably be burned to produce energy, releasing large amounts of CO₂ that will not be re-sequestered for decades. MNR's planning framework does endeavour to take

this into account, as harvesting is designed to emulate the natural cycle of forest fires. The theory is that it does not really matter if the wood is burned in the forest or in a power-generating facility, since the CO_2 is released to the atmosphere in either case. Therefore, carbon emissions due to the biofibre policy are not increased from the "business as usual" scenario, which is defined by forest fires. However, an important limitation with harvest-managed forests (as opposed to natural fire-adapted systems) was pointed out by the ECO in our 2004/2005 Annual Report. The combined area of forest that is harvested and burned each year is greater than the amount, on average, that would be burned by forest fires. This is a problem, as the total should stay within the bounds of natural variation, if natural disturbance pattern emulation is the goal. Therefore, if harvested areas are large and growing larger, a trend that this policy could exacerbate, government must maintain and even strengthen the decades-old management strategy of maximum suppression of forest fires. This would lead to two alternative outcomes that could substantially affect the size and certainty of the assumed climate-change benefit: first, an increasing expenditure of resources (which means the extensive use of fossil fuels) in fire suppression; or second, if a substantial percentage of forest fires are not suppressed, an increased total amount of wood burned each year (combining forest fires with combustion for power generation).

This problem could be exacerbated by another factor: gas release from newly exposed soils. A recent study, conducted in Germany, has shown that the method of harvesting has a significant impact on net greenhouse-gas emissions. Clear-cutting methods lead to very large releases of nitrous oxide (N_2O) (one of the most potent greenhouse gases) from forest soils for a period of several years after harvest. This method also reduces the soil's capacity to absorb and hold methane (CH_4), another prominent greenhouse gas. Although other harvesting methods (e.g., selective cutting) also produce these effects, their impacts are much less. The authors of the study found that "enhanced N_2O emissions and reduced CH_4 deposition rates due to different forest conversion practices can compensate CO_2 sequestration benefits to a significant degree." One concern might be that the development of a lucrative market for biofibre will lead to larger and more frequent clearcuts, which could, while still within the guidelines set out by MNR's sustainable forest planning process, increase the release of very potent greenhouse gases. There is no information available yet on whether or not these types of emissions are released by soils after forest fires.

These concerns do not allow us to draw the conclusion that there is no short-to-medium term climate-change mitigation benefit from the use of biofibre as fuel. The data does suggest, however, that the issue is complicated and that the pressures that an increased demand for biomass might bring to bear on the extent of the forest harvested annually, the need (and ability) to suppress forest fires, and the types of harvesting methods employed may have a substantial influence on the timing and size of the mitigation impact. Timing is an issue of particular concern. While there is little doubt that biomass fuels approximate carbon neutrality over the long term, they may be well shy of this goal in the short term (meaning the next few decades). As we approach what many climate scientists feel are a number of crucial "tipping points", which will bring irreversible and major change to the planet's climate, the next few decades will be critical.

Forest Sustainability and Biodiversity:

The issue of how much wood-residual should be left on the forest floor to prevent the depletion of nutrients has been at the heart of discussions regarding forest harvesting methods for some time. During the Class Environmental Assessment (EA) hearings in the late 1980s and early 1990s there was already a trend away from tree-length logging (TLL) to full-tree logging (FTL). With TLL, the slash is removed at the stump and left on site; with FTL, the entire tree is dragged to the landing, where the slash is put in large piles and either burned or left to decay over many years. The percentage of forest lands being harvested using FTL increased from about 60 per cent to 90 per cent during the period in which the EA hearings were occurring. This resulted in much discussion (Panel 10 of the Class EA process) on the issue of how much forest biomass can be sustainably removed from a site on an annual basis. The decision at the time of the EA, based on the scientific evidence presented, was that the amount of coarse and fine woody material typically left on site after FTL (the leaves and branches that break off as the tree is hauled to the landing site) was sufficient to provide the nutrients necessary for sustainable forest regeneration on sites with adequate soil depth and moisture regimes. At the same time, the EA authors

included a provision that MNR conduct on-going research in this area as part of an "adaptive management" program.

This research program was introduced as required by the 1994 Class EA approval and has since evolved into an on-going collaboration between MNR and the Canadian Forestry Service (CFS). One of the ongoing objectives of the research is to ascertain whether or not the typical residual left after FTL is sufficient to ensure sustainable forest productivity. Early results of MNR's research program on black spruce were presented in an Establishment Report in 2001. In summary, these analyses indicate that for FTL more than 60 years were required to replace through natural processes several nutrients on at least one type of soil (deep, coarse and dry). The standard rotation time in forest harvesting is 60 to 80 years. The study also indicated that replacement times for calcium (a key nutrient) were greater than 60 years for all soil types. Replacement times for calcium were also greater than 60 years for TLL sites (calcium occurs in much higher levels in the boles and bark of trees, which are completely removed in all logging systems). Replacement times were also greater than 50 years for three categories of nutrients in shallow, loamy, fresh-moist sites harvested using FTL methods. In summary, these results show that FTL may be considered problematic for sandy, dry sites and possibly also for shallow, loamy sites. They also indicate that calcium replacement is an issue for FTL and TLL on all types of soils.

The "replacement time" analysis is useful for determining whether long-term nutrient supplies are being diminished. However, it is not time-sensitive; in other words, it says nothing about nutrient requirements and supply levels at different stages of the growth process, from post-harvest through to maturity. The first 15 to 20 years after harvest are deemed to be the most sensitive to nutrient shortages. After harvest, soil nutrient supplies increase because of the residues left on site. As the new trees start to grow, however, demand for nutrients increases greatly while supply remains relatively static because of the lack of significant litter fall from young trees. This is when nutrient shortages can occur, slowing down tree growth. The MNR research work on potential nutrient shortfalls in early stages of forest regeneration is focusing on the growth of the trees during this critical period, rather than on the plant-available nutrient status. This research is entering its 15th year and the results are just starting to come in. To date, MNR reports that neither their studies nor those done on Jack Pine by the CFS appear to demonstrate any significant differences between growth rates for young trees in FTL sites and TLL sites, even in the soils that the replacement-time analysis indicated were more vulnerable to nutrient depletion. These preliminary results indicate that early-stage growth of trees in our boreal forests is not affected by FTL methods, at least in the early stages of the second harvest rotation.

Guidelines based on these preliminary results of MNR's studies have been incorporated into MNR's Forest Management Guide for Conserving Biodiversity at the Stand and Site Scales (Stand and Site Guide), as proposed on the Environmental Registry on November 27, 2008, (see *EBR* Registry Number 010-5218). What has not been included is a separate set of guidelines or standards for biomass removal. This is because MNR feels that the guidelines as they currently exist (which are the regulatory basis for all FMPs) cover the issue, regardless of what end-use is made of the wood. In other words, it will not matter if the slash from FTL is used for biomass, since it has already been determined that the removal of this material on designated sites (as informed by the on-going research work) is not harmful to the forest ecosystem. In the case of more sensitive sites (as defined in the Stand and Site Guide and its Appendices), MNR concludes that the requirement to use TLL and/or to leave a significant part of the slash on site, along with a variety of other guidelines required in the forest management planning process, will provide adequate protection.

Some scientists, however, have expressed the concern that there is not yet enough information to assess the longer-term impacts of FTL. The research work by MNR provides a good start, but FTL has not been practiced long enough to be able to provide real evidence beyond a single generation of trees. Recent studies from other parts of the world would seem to suggest that the productivity of the average forest soil may decline over time under intense harvesting similar to the FTL system, perhaps for reasons (e.g., health and diversity of the microbial populations) that we do not yet understand. Studies from the Scandinavian countries suggest that FTL can reduce per-tree biomass growth even in the first post-harvest generation. The results of MNR's own studies show that calcium is a potential problem for all types of soils and harvest methods and that FTL results in replacement times for several nutrients that

are close to or exceed typical harvesting rotations. While these issues are taken into account by MNR in the field guides, the margins of safety for some types of soils are not great.

Another significant concern with respect to sustainability is the lack of significant attention being paid by MNR research to the impact of FTL and clear-cutting in general on soil micro-organisms, in particular beneficial fungi. As soil ecologists continue to learn more about forest soils, they continue to stress the role of microbes such as mycorrhizal fungi in the health and productivity of virtually all forest plant species. The term "mycorrhizal" (which literally means "fungus roots") refers to a specific set of symbiotic relationships between most plants and thousands of different species of soil fungi. These mycorrhizal species form various kinds of connections with plant roots, ranging from actual infection of the roots to simple exchanges of substances through close contact of cell membranes. The plants feed various forms of carbon (e.g., sugars, carbohydrates) to the fungi and in return the fungi provide the plant with various soil nutrients and water. In effect, the fungi extend and enhance the ability of the root to keep the plant supplied with water and nutrients. Many mycorrhizae also produce plant-growth regulators that stimulate growth, natural antibiotics and phytotoxins that protect the plant from disease organisms, and act as natural barriers to infection from harmful microbes. Clear-cutting has been shown to reduce mycorrhizal populations, almost certainly because of the increased exposure to the drying effects of the sun, but probably also due to the reduction in organic matter (fungal food) that is available on the forest floor. Any policy that could further decrease wood residual could also create longer-term detrimental forest impacts due to unforeseen damage to or reductions in fungal and other microbial components of living forest soils.

In general, harvesting larger areas of the boreal forest will reduce overall forest complexity and variety. affecting biodiversity. Harvesting cannot substitute for fire in terms of overall boreal forest ecosystem dynamics. Forest fires are a chemical process, with profound changes to forest soils, release of nutrients, impacts on seed beds, etc. Fire-adapted species need those chemical changes to establish and to thrive. In contrast, removing biomass is a mechanical process, leaving behind a forest floor that is not ideally suited to fire-adapted species. Therefore, too much fire suppression leads to species shifts, with fireadapted softwood species such as jack pine being replaced by hardwoods such as birch and poplar, and to reductions in diversity of habitat and of age-classes within the forest. Increased harvesting over fire also affects nutrients. Recent studies have shown that calcium depletion is becoming a problem in both lakes and soils in the boreal forest. This is thought to be the result of forestry practices, which remove calcium-rich material like bark, in combination with acid rain, which makes the calcium more prone to leaching. In addition, clear cutting has been demonstrated to result in very large losses of calcium from forest floors through leaching. Fire, on the other hand, releases large amounts of nutrients, including calcium, but also generates a great amount of carbonized organic matter. The latter increases the soil's capacity to retain the calcium as well as other base cations, resulting in much larger nutrient pools for the next generation of trees.

The ECO has been promoting prescribed burns as a way to manage this problem (see page 204 of our 2004/2005 Annual Report), as well as a way of preventing extremely large, catastrophic forest fires by eliminating fuel build-ups. To date, however, prescribed burning has not been a major part of forest management planning in northern Ontario. One important negative impact of the biofibre policy may be to provide two further disincentives to prescribed burning: first, the need to keep the total harvested and burned area within natural variation limits; and second, the lessening of natural fire hazard through the removal of slash.

The Resource Allocation Process:

Both of the stated goals of the biofibre policy refer to the potential for new bio-product industries, either as "new opportunities to develop and use new technologies" (Goal 1), or "reduce energy costs through the development of bioenergy and biofuels projects" (Goal 2). By making a "new" resource (currently unused forest biofibre) available in very large quantities, the ministry hopes to stimulate the development of a number of "green" industries that will also add value to the province's economy (and, in particular, northern Ontario's economy).

Assessing the implications to the environment in this area is complicated by the lack of detail in the policy regarding the criteria to be used in allocating the resource. What criteria will be used and how will these

be weighted? The policy states that "MNR will encourage the development of these value-added bioproducts and bioenergy projects to support the development of a forest bioproducts and bioenergy industry" and that "to provide for future economic development opportunities, allocation decisions may include reserving some areas or volume of forest biofibre to respond to future opportunities for Aboriginal peoples and Ontario's communities, for value-added products". These very general statements do not reveal the extent of the ministry's commitment to high-value, environmentally beneficial end uses, nor the methods by which they would be carried out. A proposal that could take large quantities in the near future for simple biomass combustion for energy, for example, could effectively lock up that material for years to come, precluding its allocation to higher-value end uses. The policy is not clear on who would make that decision and how the public would have input.

This is important because some of the new technologies being developed seem to offer many advantages over the simple combustion of wood to generate heat and power. For example, at least one of the companies cited by MNR as "leading the way" in Ontario's "global leader[ship] in biofuel research" is promoting the use of pyrolysis to convert biofibre into three separate products: *bio-oil*, which can be upgraded into several products, including fuels, food additives, and pharmaceuticals; *biogas*, which can be burned to power the pyrolysis process itself, making the process a net energy producer; and *biochar*, a type of charcoal that can be used as an energy source or as a soil enhancement. One of the most promising aspects of this technology is the potential for the use of the biochar as a way to sequester carbon. The biochar resists degradation in the soil while also enhancing soil fertility, probably by increasing the soils ability to hold nutrients and moisture and to support large populations of beneficial soil microbes. Since up to 50 per cent of the carbon in the original biomass could end up in the biochar, the sequestration potential is considerable. This technology may offer an option that is not just "carbonneutral" (does not increase atmospheric carbon), but "carbon-negative" (reduces atmospheric carbon). In the policy, MNR recognizes the potential of these types of new technologies, but does not elaborate on how they will be assessed, promoted, and allocated an appropriate share of the resource.

Public Participation & EBR Process

The ministry posted the proposed policy on the *EBR* Registry on March 27, 2007 and provided the public with 120 days to comment, with the posting closing on July 25, 2007. The decision to proceed was made on August 13, 2008. The ministry received a total of 23 comments and these are summarized below.

Most of the comments were supportive of the policy in general terms. Many expressed the concern that the new processes involved might not be fair and equitable, or might not include everyone that should be involved. In particular, many comments were received on the topics of pricing of the resource, the sharing of forest management costs, and the allocation process and how it should be carried out. One group expressed concern that the allocation process might not be fair to emerging technologies/industries and suggested that a set of regional strategies be developed to aid in the allocation decisions. Different responses were received with respect to the priority promised in the policy to Aboriginal groups, with some supporting this approach and others feeling that the existing forest industry should have the priority, including first right of refusal of the resource. Many commented that despite the need to nurture a new industry, forest renewal costs must be covered. A few commented that the new biomass industry should be independent, not tied to the old forest industry, and suggested that research is needed into how this has been done in other jurisdictions, particularly Europe. Two respondents felt that MNR needs to look at purpose-grown tree crops, as well as what is needed to make this opportunity possible.

Comments included the call for clarity with respect to certain definitions, such as "unmarketable" and "unmerchantable", and also with respect to issues such as how much residue is to be left on site in all situations. One comment suggested that the policy encourage the removal of most of the residue from the harvest site, reducing the cost of planting new trees. Alternatively, there were two comments that expressed concern regarding the environmental implications of removing this material, stating that there is not enough scientific data to determine whether the existing level of residue (based on FTL) is sufficient to guarantee sustainability. Two comments indicated that the new policy was too oriented towards economics and not enough towards environmental sustainability.

SEV

MNR produced a "Statement of Environmental Values Briefing Note" for the Ontario Forest Biofibre Policy. The document focuses on the environmental benefits, in terms of the reduction in dependence on fossil fuels and the development of a new "green" industry in Ontario's north. It also indicates that the policy complements and furthers the achievement of the goal of a "healthy natural environment for Ontarians" by creating environmental benefits at the same time as it protects the natural environment. The latter claim is backed up by the fact that all activities allowed by the new policy will be carried out within the forest management plan framework. Thus, all harvesting "will occur in an environmentally sensitive and sustainable manner."

The briefing note also states that a number of SEV principles are directly served by the policy, including: an awareness of the finite capacity of natural ecosystems; the use of applied research and sharing of scientific and technological knowledge and innovative technologies; and maintaining an ecosystem approach to managing natural resources. The SEV does not mention the issue of whether or not increased harvesting will have an environmental impact; it simply assumes that the existing framework will suffice in this regard. In addition, the document states that MNR's on-going research on forest sustainability as it relates to different harvesting methods and levels of biomass removal will provide the key to an adaptive management approach.

The briefing note also outlines how the policy has taken other considerations (e.g., social, economic, and scientific) into account, such as special consideration for aboriginal communities, and how it will result in a number of desired outcomes, such as the reduction in the use of fossil fuels and the removal of slash piles, making forest regeneration easier. The briefing note also states that there are no aspects of the new policy that conflict with any provisions or commitments set out in its SEV. Finally, it sets out the measures intended to monitor the policy's achievement of the provisions and commitments made in the SEV.

Other Information

Both MNR and Ontario Power Generation (OPG) issued Requests for Expressions of Interest (RFEI) on January 20, 2009. MNR's document is presented as Stage One of a process to "provide access to available and unutilized Crown forest resources in the Northwest, Northeast, and Southern Regions of the Province." The goal of the RFEI is to collect information "on the volumes of Crown wood supply, and associated management units, to consider making available for long-term agreements in a possible Stage Two wood supply competitive process" and to possibly "facilitate the initiation of discussions with interested and supportive Aboriginal communities and proponents." The RFEI provides some estimates of merchantable and unmerchantable wood supplies by forest management unit and lays out the requirements for the Stage One submission.

Unlike the MNR document, which is focused on collecting information from a broad range of potential proponents for as many different end uses as possible, the OPG RFEI is more focused on collecting information on potential costs of one particular biomass fuel – wood pellets – and its transportation, as well as compiling a list of prospective suppliers. The RFEI provides some background information on biomass as a fuel but focuses primarily on the details of the specific project. It assumes that an estimated 2,000,000 tonnes or more of solid biomass fuel will be consumed annually by OPG's four coal-fired generating facilities, with this quantity to be phased in between the fourth quarter of 2011 and the fourth quarter of 2014. It specifies clearly that "at this time OPG is only considering solid biomass fuel; alternate non-solid fuels may be considered at a later date". The bulk of the document consists of attachments that set out expression of interest information requirements.

ECO Comment

MNR has presented its biofibre policy as if it is a win-only initiative, with little or no downside. The operating assumption is that harvesting additional forest resources under the current management system is without any significant additional environmental costs. Given this assumption, MNR can assert

that its promotion of new markets for forest resources, which have the potential to substantially increase the annual harvest, does not need any further debate. If there are no significant costs and several demonstrable benefits, the policy does not require in-depth investigation or broad public discussion.

The ECO recognizes that MNR has developed a fairly robust and responsive management system for mitigating the environmental impacts of logging. This system may be strong enough to ensure forest sustainability under current practices (although as discussed above, the long-term impacts of current harvesting methods are still uncertain). The important fact at the centre of this issue, however, is that the current management system is not without environmental cost. It does not eliminate impacts or risk, it simply mitigates impacts and reduces risk. This central point raises the question of whether or not the projected benefits are worth the potential costs.

The main benefit assumed by the biofibre policy is a reduction in greenhouse gas emissions. The ECO supports the concept of replacing fossil fuels with renewable fuels, wherever this makes environmental sense. As in many such well-intentioned plans, however, the devil is in the details. The ECO is concerned that this policy may not provide the amount of climate-change benefit that its proponents claim, especially in the vital timeframe of the next few decades. What is required is a rigorous scientific assessment of the concept of "climate-neutral" as it applies to the various types of biomass, including biofibre, so that well-informed policy decisions can be made.

The ECO is also concerned with how the implementation of this policy will affect the ecology, biodiversity, and sustainability of our northern forests. The current planning framework was developed in the absence of a demand for forest biofibre; therefore, MNR should lead a process of consultation to develop a set of biomass-harvesting guidelines for Ontario's forests, designed to complement and enhance the current set of forest guides. From a research perspective, these new guidelines should be supplemented by a renewed commitment to and expansion of the current research work being conducted by MNR on the impact of harvesting methods on sustainability, specifically with respect to the effects of biomass removal on carbon storage and soil microbial processes (e.g., mycorrhizal fungi).

The ECO is also concerned that the allocation process for the biofibre may not result in the highest value-added end-uses for the material. This concern is prompted by the lack of detail in the policy regarding the criteria to be used in allocating the resource. The policy does not state the criteria to be used in the decision-making processes and how these will be weighted. Successful proposals could take large quantities of biofibre for simple combustion for energy, for example, effectively locking up supplies of that material for years to come and effectively precluding its allocation to higher-value end uses. The policy does not make clear who would make that decision and how the public would have input. This should be done as part of, or in association with, the development of a long-term biomass-energy strategy for Ontario.

In summary, the ECO has significant concerns with the ministry's assumptions regarding: the short-to-medium term climate change benefits; the impact on forest ecology, biodiversity and long-term forest sustainability; and the adequacy of its resource allocation criteria and processes. MNR's resource stewardship principles state: "As our understanding of the way the natural world works and how our actions affect it is often incomplete, MNR staff should exercise caution and special concern for natural values in the face of such uncertainty." Given the many unknowns that arise from a close examination of the ministry's biofibre policy, the ECO believes that the application of this fundamental principle to this policy is completely appropriate.

Review of Posted Decision:

4.11 Ban on the Commercial Harvest and Sale of Frogs and Crayfish as Bait

Decision Information:

Registry Number: PB06E6006 Comment Period: 60 days Proposal Posted: February 23, 2006 Number of Comments: 47

Decision Posted: March 17, 2008 Decision Implemented: January 1, 2008

Description

In March 2008, the Ministry of Natural Resources (MNR) finalized a ban on the commercial harvest and sale of all bait frog and crayfish species in Ontario. MNR banned the commercial harvest of frog species to prevent the spread of *Ranavirus* (an infectious virus that causes diseases in amphibians) and reduce the mortality of northern leopard frogs (*Rana pipiens*). MNR banned the commercial harvest of crayfish to reduce the spread of an invasive species, the rusty crayfish (*Orconectus rusticus rusticus*). The commercial ban still allows individual licensed anglers to capture northern leopard frogs and crayfish for personal use, subject to restrictions on numbers on both types of bait and the use of crayfish in the waterbody in which it was captured. The crayfish portion of this decision, which took effect January 1, 2008, was implemented by the federal Ontario Fishery Regulations, 2007 under the *Fisheries Act*. The frog portion of this decision, which also took effect January 1, 2008, was implemented by O. Reg. 419/07, which amended O. Reg. 664/98 – Fish Licensing Regulation and O. Reg. 665/98 – Hunting Regulation under the *Fish and Wildlife Conservation Act*, 1997 (*FWCA*).

Background:

Anglers in Ontario have a long tradition of using live bait. MNR estimates that nearly 80 per cent of Ontario anglers use live bait, mostly worms and bait-fish, with a small percentage using frogs and crayfish. Anglers are allowed to capture their own bait, subject to various regulations, but the majority either buy some or all of their bait from a retail outlet. Commercial bait operators are required to have a valid commercial bait harvester or dealer licence issued by MNR. Although Ontario's live bait business totalled approximately \$17 million in 2005, according to MNR approximately 0.03 per cent of the bait sold consisted of frogs. In 2005, about 15,000 dozen crayfish were reported sold for a total retail value of about \$44,200.

Frogs in Ontario:

The one frog species still permitted for use as bait in Ontario, the northern leopard frog, has suffered marked declines throughout western Canada (British Columbia, Alberta, Saskatchewan and Manitoba) since the 1970s. Although Ontario populations have not suffered the widespread rapid declines observed in western Canada, declines have been reported in southwestern and northern Ontario. MNR states that these declines are apparently part of an overall abrupt species decline observed throughout western North America and are likely caused by the interaction of both anthropogenic (e.g., loss of wetlands due to farming and development) and natural factors (e.g., disease). Moreover, although the northern leopard frog is widespread and common throughout southern and central Ontario, MNR also reports downward trends in three of the four regional sites in eastern Ontario, suggesting an overall decline in this part of the province.

Frogs in Ontario are host to a wide range of infectious agents including viruses, bacteria, fungi, nematodes, and other parasites. Some diseases have been implicated in catastrophic declines of amphibian populations and may potentially be transmitted from frogs to other taxa. Because transporting frogs between sites allows the rapid spread of infectious agents, and because harvesting frogs can reduce populations to a level too small to withstand disease, the use of frogs as bait can greatly increase the scale of disease mortality. Recent studies have confirmed that the transfer of frogs across southern Ontario (and the conditions in which frogs are held in bait shops) have contributed to the spread of *Ranavirus*, a disease that has been associated with mass mortality events in wood frogs (*Rana sylvatica*)

and northern leopard frogs. Accordingly, the Governments of British Columbia, Alberta and Saskatchewan have all banned the use of northern leopard frogs as bait.

In the early 1990s, biologists around the world first began noticing that an alarming number of amphibian (i.e., frog, toad, salamander, and newt) populations were declining or appearing to go extinct. Today, evidence suggests that there is a distinct amphibian crisis beyond the general biodiversity crisis affecting the planet. This is likely a result of a complex interaction of factors including habitat destruction, degradation and fragmentation and other anthropogenic effects. Particularly concerning is the observation of population declines in isolated, protected and seemingly pristine areas, since this suggests that habitat protection, which is often considered the best way to ensure species' survival, is not always effective for some amphibians.

Of the 11 frog species in Ontario, at least five are reported to have suffered declines in the province: the spring peeper (*Pseudacris crucifer*), the bullfrog (*Rana catesbeiana*), the northern cricket frog (*Acris crepitans*), the pickerel frog (*Rana palustris*) and the northern leopard frog. Declines in spring peeper populations in the Toronto area have been attributed to urbanization and habitat modification, while substantial declines in Ontario's bullfrogs, a species whose long generation time makes it sensitive to increased mortality of mature individuals, have been associated with illegal harvesting, lake shoreline habitat modifications and pesticide spraying. Declines in the northern cricket frog in the province, the only species listed as at-risk in Ontario, are attributed in part to habitat loss (from drainage, dredging, landfill and natural flooding) and the introduction of non-native predatory Carp (*Cyprinus carpio*).

Regulation of Frogs as Bait in Ontario:

Concerns over global declines in amphibian populations and the decline of several Canadian amphibian species led MNR to begin regulating the harvest and sale of frogs as bait. In March 2000, MNR amended two regulations (O. Reg. 664/98 and O. Reg. 665/98) under the *FWCA* to help ensure the long-term viability of commercial and non-commercial bait activities and to bring the regulation of the bait industry in line with other commercial uses of Ontario's fish and wildlife resources. Amendments to these regulations made it illegal for persons without a commercial bait licence to sell any frog species for bait and for commercial bait licence holders to commercially trade any frog species for bait, except the northern leopard frog subject to conditions on the licence. These amendments still permitted resident and non-resident recreational anglers to catch and possess up to 12 northern leopard frogs, plus one of any other unprotected frog species for use as bait.

To reduce the spread of *Ranavirus* in Ontario, in October 2005, MNR placed a condition on all commercial bait licenses to restrict the movement of frogs from approved harvest areas in eastern Ontario to other parts of the province. MNR posted an information notice on the Environmental Registry to "move immediately to reduce the spread of the disease to new frog populations and to protect other susceptible species in the environment."

In February 2006, MNR posted a proposal notice to "solicit public input into options for reducing the harmful ecological impacts created by the use of frogs and crayfish as bait." The proposal notice stated "due to conservation and disease issues, the MNR is considering banning the commercialization of frogs as bait or a complete ban on using frogs as bait." The proposal included a discussion paper "Ecological Issues Associated with the Use of Frogs and Crayfish for Bait in Ontario: Options for the Future," in which MNR proposed two options for frog management:

- 1) Eliminating the commercial harvest and sale of northern leopard frogs. This proposed option still permitted individual licensed anglers to capture (or possess at one time) up to 12 northern leopard frogs and one frog of any species that is not specially protected.
- 2) Banning the commercial and personal use of all frog species as bait.

Public consultation on the proposal for this decision was provided for 60 Days. Two years later, in March 2008, MNR posted a decision notice on the Environmental Registry indicating that it had decided to implement Option #1 but prohibit individual anglers from using any other frog species but the northern leopard frog.

The Rusty Crayfish in Ontario:

The rusty crayfish is an invasive species to Ontario. Indigenous to the Ohio River Basin of the Midwestern United States, the species was first reported in Ontario in the Kawartha Lakes region in the early 1960s and has since established itself in southern and northwestern parts of the province. MNR suggests that the transfer of bait is a significant contributor to the continued and rapid spread of the rusty crayfish across Ontario.

Rusty crayfish have the potential to cause many detrimental problems to their introduced habitat. With its aggressive behaviour and high metabolic and growth rates, the rusty crayfish is able to outcompete juvenile game fish, forage fish species, and other crayfish species for food. Rusty crayfish also chase native crayfish out of daytime hiding locations, making them vulnerable to predation by birds and fish. According to MNR, the rusty crayfish has displaced native crayfish species, *Orconectes virilis* and *Orconectes propinquus*, in the Kawartha Lakes region and northwestern Ontario. In addition to competing with other species, because the rusty crayfish is omnivorous (i.e., eats both plant and animal matter), it can greatly reduce aquatic plant abundance and species diversity in an area, depleting habitat for aquatic invertebrates and juvenile fish.

MNR states that while it is relatively easy to visually discriminate the rusty crayfish from other native species, attempts to educate harvesters and anglers have failed to prevent their sale and use as bait. Moreover, rusty crayfish readily hybridize with native species, making identification of hybrids very difficult.

Because introduced rusty crayfish are difficult to control and impossible to eradicate, MNR asserts that preventing their spread to other waterbodies is essential. In the discussion paper "Ecological Issues Associated with the Use of Frogs and Crayfish for Bait in Ontario: Options for the Future," MNR proposed two options to address the rusty crayfish issue:

- 1) Banning the commercial and personal use of rusty crayfish as bait.
- 2) Banning the commercial and personal use of all crayfish species as bait.

After public consultation, in March 2008, MNR banned the commercial harvest of all crayfish species as bait but still permit the personal use of crayfish, so long as an angler possesses no more than 36 live crayfish for bait and the crayfish were caught in the waters in which the person is angling. Furthermore, it is prohibited for a person to bring crayfish into Ontario or transport them overland except under a scientific licence.

Implications of the Decision

Reductions in the Spread of Ranavirus and the Mortality of Northern Leopard Frogs:

MNR states that a ban on the commercial use of frogs as bait (and a ban on the personal use of all frogs except for northern leopard frogs), will prevent the spread of *Ranavirus* to new frog populations via bait operators and anglers. Moreover, these restrictions will reduce the mortality of northern leopard frogs and eliminate the potential for commercial harvests to contribute to frog population declines.

A Reduction in the Spread of Rusty Crayfish:

MNR's ban on the commercial harvest of crayfish as bait, and restrictions on the transport and import of crayfish, will reduce the spread of rusty crayfish to new watersheds and therefore their negative impacts on native species. Furthermore, limiting the personal use of crayfish as bait to the waters in which they were caught eliminates the need for anglers to discriminate between rusty crayfish, hybrids, and other species.

Loss of Economic Benefits to Bait Operators:

A ban on the commercial harvest and sale of frogs and crayfish will result in the loss of economic benefits to bait operators who sell these animals. MNR notes, however, that this loss may be partially offset by the sale of alternative live or artificial baits.

Public Participation & EBR Process

In February 2006, MNR posted a proposal notice on the Environmental Registry requesting public comment on management options outlined in its discussion paper. The ministry provided a 60-day comment period and received 47 written comments. A decision notice was posted in March 2008.

The majority of commenters supported a total ban on the use of frogs as bait, citing declining amphibian populations, the spread of disease, animal cruelty, and the availability of bait alternatives. One herpetologist commented "given the mass mortality events, given the known presence of [R]anavirus in Ontario and given the fact that frogs held in bait shops are contributing to the spread of Ranavirus the only prudent option is to ban the commercial sale of Leopard Frogs. To do otherwise is to encourage the spread of a known lethal disease." Similarly, the Bait Association of Ontario (BAO) gave its support for a ban on the use of frogs as bait in Ontario "if it is necessary to control the spread of [R]anavirus." The amphibian and reptile curator at a large Ontario zoo expressed preference for a total ban on the use of frogs as bait (on ethical, population demographics and disease grounds). The commenter urged MNR, if it decided to allow the personal use of frogs as bait, to implement an education program informing the public that frogs should be returned to and released in the region where they were collected.

The majority of commenters also supported a ban on the commercial and personal use of all crayfish species as bait, due to the ecological impacts of the rusty crayfish and difficulties in distinguishing it from other species. One commenter noted that the rusty crayfish "is an invasive exotic species and must be halted. A ban that just targeted the rusty crayfish would be impractical, considering how difficult it is to distinguish species of crayfish." Likewise an aquatic ecologist who had studied the species stated "given the difficulty of distinguishing crayfish species from one another, and the possibility of hybrids, a ban on all crayfish species as bait is the appropriate option." The BAO endorsed restrictions on the use of the rusty crayfish as bait to the waters in which the species is known to occur.

In contrast, some commenters opposed a ban on the commercial harvest of frogs and crayfish due to the expected negative impacts on businesses. One crayfish harvester argued that crayfish harvesters are at the forefront of monitoring rusty crayfish population levels and movement, while another cited difficulties with the effectiveness and availability of alternative baits. Another argued that crayfish harvesters cannot compete with big box stores to sell tackle and so must rely on live bait as their main source of business. The same harvester asserted that because people's livelihoods are at stake, dealers and harvesters should be compensated if banned from selling crayfish. A few commenters opposed a ban on the personal use of frogs and crayfish as bait.

SEV

MNR considered its Statement of Environmental Values (SEV) in reaching its decision, explaining that the decision will aid the long-term health of native frog and crayfish populations in Ontario by applying management actions to ensure sustainability and reduce the impacts of disease and exotic species on native species. The ministry stated that the environmental consequences of this decision will be positive, since it will: help reduce the spread of diseases in frogs to new populations, reduce the mortality of frogs in Ontario, and slow the spread of the exotic and harmful rusty crayfish. MNR noted that there will be some short-term economic losses to the bait industry while it adjusts to alternative baits, but that the reduction in costs of trying to control the spread of crayfish provide positive economic benefits to society.

Other Information

To implement the above decision regarding frogs as bait, the Ontario government filed O. Reg. 419/07 in July 2007 amending the Fish Licensing Regulation (O. Reg. 664/98) and the Hunting Regulation (O. Reg. 665/98) under the *FWCA*. However, MNR did not post a decision notice on this matter until March 17, 2008. In the Supplement to the ECO's 2007/2008 Annual Report, the ECO commented on this nearly eight-month delay and stressed to MNR the importance of posting decision notices in a timely manner.

In 2005, Ontario released a biodiversity strategy to describe the province's biodiversity and set out actions to protect it. The strategy identifies invasive species as a leading threat to biodiversity and outlines actions to address the threat such as preventing introductions through high risk pathways. These pathways include the use of live bait for fishing.

ECO Comment

The ECO supports MNR's decision to ban the commercial harvest and sale of frog species in Ontario. Nonetheless, the ECO believes that if MNR is serious about preventing the spread of the *Ranavirus* virus and reducing the decline of the northern leopard frog in Canada, it should follow the lead of British Columbia, Alberta and Saskatchewan: the ministry should also prohibit the personal use of northern leopard frogs as bait. Allowing individuals to continue using frogs as bait fails to completely address the spread of *Ranavirus*. Barring a total ban on the use of frogs as bait, the ECO believes MNR should restrict the transfer of frogs between waterbodies, as it did for crayfish.

The ECO commends MNR for banning the commercial harvest of crayfish as bait and placing restrictions on their transport and personal use. Although some harvesters argue that the ease with which rusty crayfish can be discriminated from other species negates the need for a complete ban, MNR's finding that education efforts have failed to prevent their sale suggests that an across-the-board solution is required. While the ECO acknowledges that some bait harvesters will experience economic setbacks as a result of the ban, shutting down a \$44,000 a year industry seems like a reasonable trade-off for reducing the spread of an invasive alien species and protecting Ontario's native biodiversity.

SECTION 5

ECO REVIEWS OF APPLICATIONS FOR REVIEW

SECTION 5: ECO REVIEWS OF APPLICATIONS FOR REVIEW

5.1 Ministry of Energy

Review of Applications R2007016 and R2007017:

5.1.1 Review of the Need to Prescribe the *Energy Conservation Leadership Act, 2006*(Review Undertaken by ENG, Returned by MOE)

Background/Summary of Issues

In September 2007, the ECO received an application regarding the use of the *Environmental Bill of Rights* (*EBR*) to advance energy conservation practices in Ontario. The applicants requested a review of the need to prescribe the *Energy Conservation Leadership Act*, 2006 (*ECLA*) under the *EBR* for various purposes, including reviews under Part IV of the *EBR*. Ecojustice prepared and submitted this application on behalf of the two applicants.

The *ECLA*'s preamble states that the "Government of Ontario is committed to removing barriers to, and promoting opportunities for, energy conservation and to using energy efficiently in conducting its affairs." The applicants asserted that because the Act concerns efforts to conserve energy (and consequently reduce greenhouse gas emissions), the *ECLA* is environmentally significant and therefore should be prescribed under the *EBR*.

The applicants were concerned that without the *ECLA* being prescribed, Ontarians would be unable to request a review of an existing (or the need for a new) regulation or policy made under the *ECLA*. Moreover, the ECO would not formally monitor, report or comment on responses by the Ministry of Energy (ENG) to these requests. The applicants were also concerned that without the *ECLA* being prescribed, there would be no requirement that regulations and policies developed under the Act be posted on the Environmental Registry for public comment and therefore no formal opportunity for the ECO to assess how the ministry consulted the public when developing regulations and policies under the *ECLA*.

One of the specific concerns of the applicants was that restrictive covenants or agreements used by some property developers were prohibiting some Ontarians from using outdoor clotheslines to dry laundry. Restrictive covenants are deed restrictions that apply to a group of homes in a particular development. The applicants reasoned that if the Ontario government listed clotheslines as a good, service or technology under section 3(1) of the *ECLA*, all restrictive covenants preventing the use of this simple energy-saving measure in Ontario would be rendered invalid. The applicants asserted that there are valid environmental reasons (e.g., reducing smog, mercury and greenhouse gas emissions that result from energy use) for removing this barrier to energy conservation. The applicants offered this as just one example as to why it is important for the public to have the *EBR* right to request reviews of the *ECLA*. Other energy conservation measures and technologies that could be listed under section 3(1) of the *ECLA* could have far greater implications for reducing environmental harm attributed to energy use.

The applicants initially requested that the Ministry of the Environment (MOE) review the need to prescribe the *ECLA* under the *EBR*, since MOE is the ministry that administers O. Reg. 73/94 (the *EBR* regulation that identifies ministries and legislation prescribed under the *EBR*). In October 2007, the ECO forwarded the application to MOE after the ministry informed the ECO that it would accept the application for preliminary review. Two weeks later, however, MOE returned the initial application (R2007016), indicating that MOE required a request from ENG to prescribe the *ECLA*. The return of application R2007016 rendered it inactive. On October 26, 2007, the ECO forwarded the application (as R2007017) to ENG for consideration.

In June 2008, the Ministry of Energy amalgamated with the Ministry of Public Infrastructure Renewal to form Ontario's Ministry of Energy and Infrastructure (MEI). As of July 2009, MEI was not prescribed under the *EBR*.

Ministry Response

ENG informed the applicants in December 2007 that the ministry would conduct a review of the application. On January 21, 2008, ENG posted an information notice on the Environmental Registry seeking input from the public on a proposed regulation to remove restrictive covenants on residential clotheslines. On April 17, 2008, the government filed a regulation (O. Reg. 97/08) under the *ECLA*, which designates clotheslines under subsection 3(1) of the *ECLA* and overrides certain restrictions on their use.

On April 18, 2008, MOE posted a regulatory proposal on the Registry for comment, proposing the amendment of O. Reg. 73/94 for the purpose of prescribing the *ECLA* under the *EBR*, along with other proposed changes. On June 19, 2008, the Government of Ontario filed O. Reg. 215/08 under the *EBR*, which amended O. Reg. 73/94 and prescribed the *ECLA* under the *EBR*.

ECO Comment

The ECO applauds ENG (now MEI) for reviewing this application and working with MOE to prescribe this environmentally significant Act. The ECO welcomes increased opportunities for public engagement in environmentally significant decision-making and encourages the government to prescribe other similar legislation under the *EBR* in a timely manner. See Section 11 of this Supplement for the status of ECO requests to prescribe new laws and regulations under the *EBR*.

The ECO also commends ENG for removing the barrier to the use of clotheslines, a simple and effective means of energy conservation, in Ontario. Electric clothes dryers account for six per cent of the total electricity consumption of a typical Ontario household.

In May 2009, the government passed Bill 150, the *Green Energy and Green Economy Act, 2009* (*GEGEA*). This bill is an omnibus renewable energy law that enacts the *Green Energy Act, 2009* (*GEA*) and repeals both the *ECLA* and the *Energy Efficiency Act*. Many of the provisions of the two repealed statutes are re-enacted in the *GEA*, including the permission to use designated goods, services and technologies despite restrictions in municipal and condominium by-laws or other restrictions imposed at law other than by an Act. Given that the *GEA* incorporates many of the provisions of the *ECLA* and similarly concerns efforts to conserve energy, the ECO believes that the applicants' original arguments for the prescribing of the *ECLA* also apply to the *GEA*. In June 2009, MOE posted a regulation proposal on the Environmental Registry, proposing, amongst other things, that the *GEA* be prescribed under the *EBR*.

Amongst other things, the *GEGEA* amends the *EBR* to require the ECO to report annually to the Legislature on energy conservation and greenhouse gas emissions. These amendments task the ECO with identifying: any Acts or regulations of Ontario or Canada; any policies of Ontario, Canada, or an Ontario municipality; and any Ontario municipality by-laws that "result in barriers to the development or implementation of measures to reduce the use or make more efficient use of electricity, natural gas, propane, oil and transportation fuels." The ECO applauds the government for seeking input on opportunities to remove roadblocks to energy conservation and looks forward to fulfilling this important reporting responsibility.

5.2 Ministry of the Environment

Review of Application R2005004:

5.2.1 Review of MOE's Biomedical Waste Guideline (Review Undertaken by MOE)

Background/Summary of Issues

In August 2005, two applicants requested a review of Guideline C-4; the Management of Biomedical Waste in Ontario, administered by the Ministry of the Environment (MOE). The applicants argued that the guideline was over 10 years old, and is unenforceable. They noted that very large quantities of biomedical waste were being discarded into the non-hazardous waste stream; that many unlicensed companies are collecting biomedical waste; and that biomedical waste packaging standards are not being followed.

Ministry Response

On December 22, 2005, MOE agreed to carry out a review, and committed to providing the applicants with a copy of the review outcome no later than October 1, 2006. However, the review remains in progress; in 2008, MOE conducted consultations regarding biomedical waste management, and in October 2008, MOE posted a notice on the Environmental Registry proposing amendments to Guideline C-4 (*EBR* Registry Number 010-3864), with a 60-day public comment period. The proposed guideline is 13 pages long, and covers issues such as packaging, labelling, storage, transportation, treatment and disposal of biomedical waste. As of June 2009, no decision had been posted on this guideline.

ECO Comment

The ECO will review the handling of this application for review and the ministry's decision on the proposed amendments to Guideline C-4 once they are finalized.

Review of Application R0334:

5.2.2 Classification of Chromium-containing Waste as Hazardous (Review Undertaken by MOE)

Background/Summary of Issues

On November 20, 1995 the applicants requested that the government regulate the different forms of chromium according to their toxicity. Under R.R.O. 1990, Regulation 347 – General Waste Management ("Reg. 347"), made under the *Environmental Protection Act (EPA)*, a waste is considered hazardous if the total chromium level in a leachate test exceeds five milligrams per litre (mg/L) even if the waste contains only the non-toxic form of chromium. The applicants explained that other jurisdictions, including the United States, differentiate between toxic and non-toxic forms of chromium. According to the applicants, continuing to classify the non-toxic form of chromium as hazardous "places an unnecessary economic burden on industry" for managing chromium-contaminated waste and diverts resources away from "more legitimate environmental concerns."

Background:

Chromium (Cr) is a metal that is used to produce stainless steel, chrome plating and catalytic converters; and as a catalyst in the dyeing and tanning of leather. Although Cr can occur in nine different states, only two states, trivalent Cr(III) and hexavalent Cr(VI), are common in the natural environment. Trivalent chromium occurs in rock and is released into soil, water and air by weathering and erosion. Although human activity accounts for some of the Cr(III) in the environment, most of the Cr(VI) in the environment is from human activity. Combustion of fossil fuel by industry accounts for approximately 51 per cent of chromium discharges to air in Canada. Industry, municipal sewage treatment plants, leather tanning businesses, urban stormwater runoff, pulp and paper mills and power stations discharge chromium to water.

Chromium can also be found in many aquatic and terrestrial plants and animals including foodstuffs. Trivalent chromium is essential to the metabolism of glucose in humans and animals, and a recommended daily intake has been established in the United States. Deficiencies may cause heart conditions and diabetes; whereas, excesses may cause skin rashes. Hexavalent chromium is known to cause health effects, such as skin rashes, allergic reactions, respiratory problems, kidney and liver damage and lung cancer, particularly in people who work in the steel and textile industries. Ecotoxicological studies have shown that *Daphnia* and some species of aquatic microflora are particularly sensitive to Cr(VI); whereas, fish may be more sensitive to Cr(III).

Hexavalent chromium was declared toxic to the environment and a danger to human life or health under the *Canadian Environmental Protection Act* (*CEPA*). Regulations made under *CEPA* also establish a total chromium limit of five mg/L when the waste is subject to leachate quality testing. The regulations apply to the export and import of hazardous wastes and hazardous recyclable materials, and to the interprovincial movement of hazardous wastes.

Summary of Issues:

The applicants explained that leather tanning uses only the trivalent form of chromium and that less than five per cent of the chromium in tannery waste is typically available for leaching. Since tannery waste is usually designated as hazardous under Reg. 347, it must be disposed at a landfill site approved to receive chromium-containing waste. According to the applicants, the cost in 1995 of disposal was \$300 – \$350 per tonne. In comparison, the cost of disposal of non-hazardous waste at a municipal landfill site was about \$60 per tonne. The applicants explained that the cost of transporting hazardous waste is also higher than for non-hazardous waste, and that tanneries must obtain liability insurance of \$5,000,000. Furthermore, one of the applicants, who owns a tannery business, noted in the 1995 application that the company's line of credit has been cut off because its waste is characterized as hazardous.

According to the applicants, the U.S.A.'s Environmental Protection Agency was required to remove limits related to the disposal of sewage sludge containing Cr(III) when it failed to prove to a U.S. federal court in 1994 that Cr(III) was likely to pose a human or environmental risk.

Ministry Response

More than 13 years after the applicants were advised that the Ministry of the Environment (MOE) would undertake the review, its response remains outstanding. On February 23, 1996 MOE advised the applicants that it was reviewing the regulation as part of overall program streamlining and would consider industry's ability to comply with requirements. MOE indicated that the review would be completed within 10 – 14 months, i.e., by April 1997. Later in the year, MOE advised the applicants that its review would be "coordinated and harmonized with the federal review of the national hazardous waste definition" and timing would be dependent on the timing of the federal review. In December 1997, MOE advised the ECO that since proposed changes to a federal Transport Canada regulation would address the issue, it would wait for the federal regulation to be finalized before doing its own review.

In 2002, MOE contacted a representative of the applicants and confirmed that the applicants were still interested in pursuing this review. In 2005, MOE advised the ECO that the latest draft federal hazardous waste regulations under *CEPA* do not exempt blue leather tanning waste – most tanning companies use

Cr(III) to tan leather in a process called blue leather tanning – and that it appears that the federal government does not intend to exempt the subject waste. MOE indicated that it would follow-up with Environment Canada to determine if it intends to exempt the subject waste. In March 2009, MOE advised the ECO that the updated federal hazardous waste regulations do not contain an exemption for tanning waste containing chromium.

ECO Comment

The delay in making a final decision on this application under the *EBR* is unprecedented. More than 13 years have elapsed since MOE advised the applicants that it would undertake the review. During that time, the federal government has proposed and consulted on amendments to its hazardous waste definition and has updated some of its hazardous waste regulations. MOE's objective of co-ordinating and harmonizing its review with that of the federal government's was understandable in 1996. However, MOE's failure to take independent action when it became apparent that national efforts would be protracted is totally unacceptable. The ECO urges MOE to make a decision and close this application.

Review of Applications R2006006 and R2006010:

5.2.3 Application for Review to Protect Groundwater of the Waterloo Moraine (Reviews Undertaken by MOE)

Background/Summary of Issues

In June and July 2006, two applications for review were submitted to the ECO outlining the need for a new policy or Act to protect the Waterloo Moraine.

The applicants asked that the Ontario government protect the Waterloo Moraine and its environmental features that they perceived as being at risk from unsustainable development. The applicants proposed that an Act or policy be created that would protect groundwater quality and quantity in the moraine. In the alternative, the applicants suggested that an area-specific policy statement for the Waterloo Moraine should be drafted.

Ministry Response

The Ministry of Natural Resources and the Ministry of Municipal Affairs and Housing both denied the applications. See pages 150 and 157 in the Supplement to the 2006/2007 Annual Report for their respective responses.

In April 2007, after an eight month delay, the Ministry of the Environment (MOE) agreed to conduct a review to determine whether there is a need to develop provisions to protect groundwater and source water of the Waterloo Moraine beyond what currently exists in policies and legislation. MOE stated it would not review the *Clean Water Act, 2006* nor the Provincial Policy Statement. MOE expected the review to take 16 months.

MOE completed its review and provided it to the applicants on May 4, 2009. The ministry stated that its review concluded that new provincial policy or legislation was not required to protect the Waterloo Moraine at this time.

ECO Comment

Because MOE's decision was issued after the ECO's 2008/2009 reporting period (ending March 31, 2009), the ECO will continue to follow developments regarding the Waterloo Moraine and report on MOE's review in next year's Annual Report.

Review of Applications R2006019 and R2006020:

5.2.4 Review of Ontario's Policies on Transboundary Smog, Mercury Emissions and Climate Change

(Review Denied by MOE and ENG)

Background/Summary of Issues

In October 2006, applicants filed an application for review with the Ministry of the Environment (MOE) and Ministry of Energy (ENG) requesting a review of their policies related to transboundary smog, mercury emissions and climate change. The application was filed by Sierra Legal Defence Fund (now Ecojustice Canada) on behalf of the Registered Nurses Association of Ontario, the Canadian Association of Physicians for the Environment, Muskoka Lakes Association, Georgian Bay Association, and World Wildlife Fund.

The application was triggered by the Ontario government's June 2006 decision to indefinitely delay the phase-out of coal-fired electricity generating facilities operated by Ontario Power Generation (OPG). This decision reneged on a 2003 commitment to close coal plants in the province by 2007. After closing the Lakeview plant in 2005, the government decided to delay the closures of the four other plants first to 2009, and then indefinitely.

In August 2007, after the application for review was filed, the government passed the Cessation of Coal Use Regulation (O. Reg. 496/07) under the *Environmental Protection Act, (EPA)*. The regulation set a deadline of 2014 for the phasing out of all coal plants in the province. (For more information on the government's plans regarding coal plant closures please refer to page 131 of the Supplement to the 2007/2008 Annual Report.)

The 2006 application for review requested that MOE and ENG review and identify measures they intended to take to eliminate the health, social and environmental impacts caused by the government's abandonment of its earlier plan to meet the 2009 deadline to close the coal plants. Specifically, they were interested in how Ontario intended to comply with: the Ozone Annex to the 1991 U.S.-Canada *Air Quality Agreement*, the proposed Canada Wide Standard on Mercury; and the commitment to combat climate change. The applicants stated that the closure of coal-plants was the key measure the government relied upon to meet each of these commitments.

Ozone Annex to the 1991 U.S.-Canada Air Quality Agreement:

Ground level ozone is formed when nitrogen oxides (NOx) and volatile organic compounds (VOC) react in sunlight. Along with particulate matter, it is the main component of smog. In Ontario, OPG-operated coal plants account for approximately 20 per cent of the pollutants that create smog and acid rain. In 2003, the five coal plants emitted 37,000 tonnes of nitrogen oxides (14 per cent of all nitrogen oxides produced in Ontario), and 154,000 tonnes of sulphur dioxide (28 per cent). Significant amounts of the precursors of smog also originate in the U.S. and travel into Ontario.

These air pollutants contribute to adverse human health effects such as respiratory illnesses. A 2005 study commissioned by ENG, entitled "Cost Benefit Analysis: Replacing Ontario's Coal-Fired Electricity Generation", revealed a correlation between air pollution from coal-fired power plants and up to 668

premature deaths, 928 hospital admissions, 1,100 emergency room visits and 333,600 minor illnesses on an annual basis.

Signed in December 2000, the Ozone Annex to the 1991 U.S.-Canada *Air Quality Agreement* aims to reduce the transboundary movement of smog-causing pollutants. Canada estimated that by 2010, annual NOx emissions in the Canadian transboundary region will be reduced by 44 per cent from 1990 levels. One of the main initiatives in meeting this target included annual caps by 2007 of 39 kilotonnes of nitrogen dioxide emissions from fossil-fuel power plants in central and southern Ontario.

In a 2006 MOE backgrounder, the Ontario government highlighted the phasing out of coal by 2009 as a key initiative to meeting its commitments under the Annex. However, the applicants noted in their application for review that while the coal phase-out would have met these targets, the applicants wanted to know how these targets would be met after the 2009 coal phase-out date was abandoned.

Proposed Canada Wide Standard on Mercury:

Mercury is an element found in nature, however the atmospheric deposition of anthropogenic mercury is the major source of mercury in Ontario's lakes, soil and vegetation. Coal-fired power plants are a significant source of mercury emissions. According to MOE, annual mercury emissions from Ontario's coal-fired power plants dropped from 495 kilograms in 2003, to 191 kilograms in 2008.

Mercury is a toxic, persistent and bioaccumulative substance. The severity of mercury's toxic effects on human health depends on the form and concentration of mercury and the route of exposure. Human exposure can affect the nervous system, kidneys, neurological development, skin, cardiovascular system and immune system, among other biological factors. In wildlife, mercury can contribute to nervous system damage and reproductive failure.

In 2005, the Canadian Council of Ministers of the Environment (CCME) accepted in principle the draft Canada-Wide Standard (CWS) for mercury from coal-fired power generation. The CCME then endorsed the CWS for Mercury Emissions from Coal-Fired Electric Power Generation Plants (EPG), in 2006. A CWS is a nationally unified environmental objective that allows participating jurisdictions to implement complementary plans in a manner that suits their individual circumstances.

The mercury CWS sets two targets:

- provincial caps on mercury emissions from existing coal-fired EPG plants, with the 2010 provincial caps representing a 60 per cent national capture of mercury from coal burned, or 70 per cent including recognition for early action; and
- capture rates or emission limits for new coal plants, based on best available control technology, effective immediately.

A second phase of the CWS may explore the capture of 80 per cent or more of mercury from coal burned for 2018 and beyond.

After the draft was accepted by the CCME in 2005, Ontario committed to closing all its coal-fired power plants to meet or improve upon the new nationwide standards. However, by June 2006, the province notified the CCME that it would be unable to keep its commitment to reduce mercury emissions by 50 per cent from 2003-2004 levels by 2010. The applicants cite a Toronto Star article which states that the failure was a result of the government backing away from its promise to close coal-fired power plants by 2009.

Combating Climate Change:

Coal-fired power plants are also major emitters of greenhouse gases, a known contributor to climate change. The provincial government stated that in 2003, "Ontario's coal-fired plants are the largest industrial source of greenhouse gas emissions in the province." Environment Canada's figures indicate that Ontario's four coal plants produced 24 million tonnes of greenhouse gases in 2006.

In June 2005, the government stated that closing its coal plants was the "largest single step being undertaken to help Canada meet its Kyoto targets. The phase out of coal is expected to provide up to half of the province's greenhouse gas reduction contributions under the Kyoto Protocol."

The applicants state that the delay in closing the coal-plants resulted in Ontario failing to uphold its Kyoto targets.

Recent Governmental Developments on Mercury, Smog and Climate Change: Since this application for review was filed, Ontario has made several announcements affecting the amount of mercury, smog precursors and greenhouse gases being released into the environment:

- In December 2006, MOE initiated consultation on a diversion program for Municipal Hazardous or Special Waste (MHSW). The program intends to capture items containing mercury such as dry cell batteries, fluorescent light bulbs, switches, and measuring devices and divert them from the municipal waste stream.
- In April 2007, Canada and Ontario both announced their intentions to ban the sale of incandescent light bulbs by 2012 in order to lower greenhouse gas emissions.
- In August 2007, the Ontario government released the "Go Green: Ontario's Action Plan on Climate Change (the Action Plan), containing numerous initiatives for combating climate change (for more information on the Action Plan refer to page 13 of the 2007/2008 Annual Report).
- In August 2007, Ontario filed the Coal Cessation Regulation (O. Reg. 496/07) under the *Environmental Protection Act*, legally requiring Ontario's coal-fired power plants to shut by 2014.
- In May 2008, MOE proposed amendments to O. Reg. 496/07 that would impose an interim cap of 11.5 megatonnes of carbon dioxide emissions from coal-fired power plants starting January 1, 2011.
- In December 2008, the Ontario government released its *Climate Change Action Plan Annual Report 2007-2008*, highlighting its progress in implementing the initiatives identified in its August 2007 Go Green report. In response, the ECO released its Special Report to the Legislative Assembly of Ontario, which reviewed the province's Climate Change Annual Report.

Ministry Response

Ministry of the Environment:

MOE concluded that the review was not warranted in a letter sent April 2008, approximately 16 months late. The ministry outlined that the recently filed Coal Cessation Regulation will end the use of coal by 2014. Furthermore, MOE stated that it has made significant progress in meeting commitments under the Ozone Annex, CCME Canada Wide Standards for mercury, and in combating transboundary air pollution and climate change.

The ministry stated that the Emissions Trading Regulation (O. Reg. 397/01 under the *EPA*) was developed to help meet Canada's commitment under the Ozone Annex, and both the regulation and Annex were developed without reference to the phase-out of coal-fired electricity generation. MOE also noted that Ontario's emissions for nitrogen oxides are below the targets set out in the Annex.

MOE also reaffirmed its commitment to the CCME Canada Wide Standards for mercury, and planned to do better than the standards with the ultimate goal of zero mercury emissions from coal-fired electricity generation. With respect to climate change, MOE highlighted a series of policies, programs and initiatives under its "Go Green" action plan released in August 2007. This included passing the Coal Cessation Regulation, which was informed by the Ontario Power Authority's (OPA) Integrated Power System Plan (IPSP). MOE explained that the IPSP was developed on the principles of feasibility, reliability, cost, flexibility, environmental performance and social acceptance. MOE also asserted that it has "taken an aggressive position regarding Transboundary Air issues," and listed legal and scientific initiatives it has adopted on the issue.

In an email to the ECO in September 2008, MOE staff stated that its proposal to amend the Coal Cessation Regulation (O. Reg. 496/07) to include an interim cap on carbon dioxide emissions from coal-

fired power plants, would result in constraints on the generation capacity of coal plants, and consequently reduce both carbon dioxide and mercury emissions. Ontario Power Generation estimates that total mercury emissions from Ontario coal plants would fall to 120 kilograms by 2011 as a result of this regulatory amendment.

Ministry of Energy:

In December 2006, ENG also denied the applicants' request for review. It stated that the government remains committed to replacing coal-fired power plants with "cleaner sources of energy and conservation, however system reliability is a priority."

ENG also referred to the IPSP and pointed to its goals to reduce electricity demand by 6,300 megawatts by 2025, and to increase the capacity of renewable sources to 15,700 megawatts by 2025. The Plan also aims to eliminate the use of coal "in the earliest practical time frame" and recommends cost-effective measures to reduce air emissions from coal-fired generation. ENG emphasized that O. Reg. 424/04 under the *Electricity Act*, 1998, as amended by O. Reg. 277/06, requires the OPA to consider environmental protection and environmental sustainability when developing the IPSP.

ENG also noted that it closed Lakeview generating station in 2005, and between 2003 and 2005 coal-fired electricity in Ontario was reduced by 17 per cent. Consequently, it stated that carbon dioxide, sulphur dioxide, and nitrogen oxide emissions were reduced by 15, 28 and 33 per cent respectively. ENG further cited plans to reduce electricity demand by five per cent by 2007. ENG believed the commitment to replace coal-fired generation with cleaner sources and conservation, while maintaining system reliability, was consistent with its Statement of Environmental Values.

ECO Comment

The ECO reiterates its comments from past Annual Reports, that it is important for Ontario to significantly reduce mercury emissions, greenhouse gas emissions, and the emissions of the precursors to smog. Since coal-fired power plants are a significant source of these emissions, closing these plants as soon as it is feasible is an important policy objective. In the meantime, Ontario should strive to meet the interim greenhouse gas targets it has committed to, as well as tackle the other sources of harmful emissions. For instance, if coal-fired power plants represent 20 per cent of mercury emissions, then MOE and other applicable ministries must address the remaining 80 per cent to protect the health of Ontarians and the environment. For more information please refer to the application on methylmercury in the boreal forest in Section 5.2.14 of this Supplement.

The ECO is dismayed with the extensive delay by MOE in providing the applicants with its decision. Although the applicants and the ECO made several inquiries with MOE on the lateness of its decision, the ministry did not provide an explanation for the delay in its correspondence or in its decision letter. It is puzzling that ENG was able to release its decision in accordance with the statutory timelines but MOE needed 18 months to release its decision. Both ENG and MOE provided very similar information in their decision letters. Such delays frustrate the public interest, undermine the *Environmental Bill of Rights*, and hamper the ability of the ECO to report to the Legislative Assembly.

Overall, the ECO is pleased that MOE and ENG have made progress in addressing the harmful emissions from coal-fired power plants and encourages the province to reduce its use of coal as soon as it is feasible.

Review of Application R2006021:

5.2.5 Review of Section 11.4 of the *Environmental Assessment Act* (Review Undertaken by MOE)

Geographic Area: Province-wide

Background/Summary of Issues

In October 2006, two applicants representing Lake Ontario Waterkeeper (Waterkeeper) and Friends of the Red Hill Valley (FRHV) requested a review of section 11.4 of the *Environmental Assessment Act* (*EAA*). This section, which was enacted when the *EAA* was substantially amended in 1996, is intended to allow Ontario residents to file a submission asking that the Minister of the Environment re-evaluate a previous environmental assessment (EA) approval and decide whether amendments to the original approval are desirable.

Amendment provisions are available in several approvals and approval processes issued under the *EAA* but not all of them.

The applicants requested that section 11.4 of the *EAA* be amended to provide more clarity about the Ministry of the Environment's section 11.4 submission and evaluation process. Moreover, they requested that all future approvals issued by the Ministry of the Environment (MOE) under the *EAA* contain expiration or renewal dates. The applicants also requested that the *EAA* be amended so that time limits would be imposed on the minister when he or she is asked to conduct a review under section 11.4.

In their October 2006 application on section 11.4, Waterkeeper and FRHV argued that basic rules of administrative justice require that discretionary powers such as those contained in section 11.4 of the *EAA* be exercised in good faith. The applicants further pointed out that the Supreme Court of Canada has consistently upheld the right of applicants under laws such as section 11.4 to timely, written decisions. The applicants asserted that written decisions are important because the writing process encourages decision-makers to apply a more careful reasoning process. In addition, written decisions are more transparent, tend to promote better decision-making and inspire greater public confidence in decision-making processes.

Background:

In August 21, 2003, Waterkeeper filed a request under section 11.4 of the *EAA* for a re-evaluation of provincial approvals granted in the mid-1980s for the construction of an expressway through Red Hill Valley in Hamilton, Ontario. Waterkeeper noted in their August 2003 request that section 11.4 of the *EAA* "grants the Minister authority to reconsider approval for a project when circumstances have changed or new information arises." Waterkeeper observed that the proposed expressway will be built in an environmentally sensitive area, through wetlands and close to a former landfill site. Waterkeeper also cited criminal charges and administrative orders against the City of Hamilton for polluting the Red Hill Creek, arguing that the city had not demonstrated it could build the proposed expressway in a responsible and environmentally sensitive manner. In addition, a letter-writing campaign was launched by Waterkeeper in support of the section 11.4 request, and dozens of Waterkeeper members and supporters wrote to the minister expressing their support. MOE never formally responded to the August 2003 request under section 11.4 of the *EAA*.

In November 2003, after a change in government following a fall election, Waterkeeper wrote the newly-appointed Minister of the Environment, Leona Dombrowsky, and asked her to exercise her discretion and review the Red Hill Creek Expressway approvals under the authority of section 11.4. A copy of the August 2003 request was enclosed with this renewed submission. Moreover, Waterkeeper requested an immediate response because they felt the situation, at the time, was "volatile." Waterkeeper further noted

that the Red Hill Creek Expressway case informed the debates in 1996 when the amendments related to section 11.4 were being considered by the Ontario Legislature. MOE also never formally responded to the second section 11.4 submission on the EA approval for the Red Hill Creek Expressway. The lack of formal MOE responses to these two section 11.4 submissions prompted the applicants to file this application for review under the *EBR*.

Ministry Response

MOE agreed to undertake this *EBR* application for review in February 2007, more than two months after a decision was required. In its response, MOE acknowledged that the key purpose of the *EBR* application for review process is to improve environmental decision-making in the Ontario government. MOE further commented that this *EBR* review of section 11.4 will allow MOE "to make the environmental assessment process more transparent and efficient as it relates to *EAA* section 11.4 and [will enhance] the Minister's decision-making ability to reconsider an approval to proceed with an undertaking if there is a change in circumstances or new information available." Moreover, MOE also referred to the evidence provided by the applicants, and stated it had "considered the need for the review including the examples provided by the applicants on requests to have the minister reconsider the Red Hill Creek Expressway Environmental Assessment."

In addition, MOE noted the March 2005 report titled Improving Environmental Assessment in Ontario: A Framework for Reform, the Environmental Assessment Advisory Panel, and pointed out that the panel expressly commented on section 11.4 of the *EAA* in its report. MOE stated that "while no explicit recommendations were made, the [EA Advisory] Panel identified challenges with the minister making use of this provision."

MOE did not respond to the applicants' request that all future approvals issued under the EAA contain expiration or renewal dates.

In April 2008, MOE completed its review and agreed to modify its policies on the handling of section 11.4 *EAA* submissions. In its response, MOE specifically agreed to "make the environmental assessment process more transparent and efficient as it relates to *EAA* section 11.4 and the Minister's decision-making ability to reconsider an approval to proceed with an undertaking if there is a change in circumstances or new information available." In support of this decision, MOE further noted that "the purposes of the *EBR* call for increased accountability of the government of Ontario for its environmental decision-making."

The Proposed Policy as of May 2009:

In August 2008, MOE posted a proposal notice on the Environmental Registry about its proposed policy and procedures for administering submissions made under section 11.4 of the *EAA*. The proposal was posted for a 45-day public comment period. (See *EBR* Registry Number 010-4265.)

The proposed procedures for handling section 11.4 submissions are described in a discussion paper that was posted on the Registry as an attachment to the proposal notice. The proposal notice pointed out that subsection 11.4(4) of the *EAA* allows MOE to develop procedures for amending approvals to certain approved undertakings that are not covered by amending provisions or exemptions (see below under Other Information for additional background) when work on the undertaking has not been commenced by the proponent.

The proposed procedures outline the following: 1) the type of information that is to be submitted by a "submitter" seeking a section 11.4 review; 2) how the ministry will review the submission; 3) how the ministry will consult and inform the public and the proponent of the submission; 4) the timelines for the ministry's review and decision; and 5) how the Minister of the Environment will inform the applicant of his or her decision.

According to the proposed policy, the responsible MOE Director normally will have 30 days to conduct a review of the proposed amendment or revocation. During that period the Director will determine whether

a change contemplated by the amendment or revocation "has the potential to cause negative environmental effects before making a recommendation to the Minister." If the MOE Director decides the amendment or revocation has the potential to cause negative environmental effects, he or she, may circulate the proposed recommendation or particulars of it for comment. The proposed policy states that the proposed recommendation may be shared with: 1) the submitter; 2) the approval holder; 3) persons who have filed Statements of Concern; and 4) any other person the Director considers appropriate. Moreover, the Director will provide parties to the submission process with a minimum of 15 days for additional comments on any proposed recommendation or particulars before providing it (or them) to the minister.

The proposed policy also states that, within 30 days of the conclusion of Director's review period or any additional comment period, the minister shall: make a decision to proceed with a proposed amendment and amend the approval in accordance with a "Notice of Amendment." The minister also has the option of revoking the approval. In addition, the minister's decision with reasons will be provided to the submitter and copied to the approval holder, and posted on MOE's EA Activities website.

Other Information

In May 2003, two applicants associated with FRHV filed an *EBR* investigation alleging that the City of Hamilton had committed an offence under the *EAA* by failing to comply with certain terms and conditions of Order in Council 582/97 related to the Red Hill Valley Expressway. According to the applicants, Order in Council 582/97 set up legal requirements for assessment, monitoring, public consultation and public reporting that the proponent allegedly did not implement adequately or at all. (See the ECO's Review of Application I2003003 on pages 310-317 of the Supplement to our 2003/2004 Annual Report.)

MOE concluded that the majority of the alleged contraventions outlined by the applicants did not warrant further investigation. However, MOE stated that it took compliance issues seriously and would continue to monitor a number of matters related to the proponent's compliance with the Order in Council 582/97. The August 2003 section 11.4 request from Waterkeeper for a re-evaluation of provincial approvals for the Red Hill Valley Expressway was submitted shortly after the May 2003 *EBR* investigation was rejected by MOE.

In August 2008, Waterkeeper, Environment Hamilton and FRHV submitted comments to MOE on the proposed policy and procedures for administering submissions made under section 11.4. In their comments, the groups stated that "the Red Hill Creek Expressway saga taught us that Ontario's environmental assessment process needs strengthening." They generally supported the draft changes, with the addition of some improvements, and noted "the new policy helps to close a loophole in the environmental assessment process."

In certain cases, section 11.4 submissions are unnecessary because some EA approvals and Class EAs have provisions allowing the public to request that the minister consider amendments on an ongoing basis. For example, in 2007 MOE proposed amendments to a number of conditions of the Ministry of Natural Resources (MNR) 2003 Forest Management Class EA approval ("the 2003 Order"). These amendments enable the Director of the Environmental Assessment and Approvals Branch (EAAB), rather than the minister, to make decisions on requests for individual EAs. In addition, administrative amendments were made to various conditions, primarily to reflect work done by the Ministry of Natural Resources (MNR) since the 2003 Order. According to MNR, these administrative amendments "provide clarity, remove redundancies, consolidate related requirements, update language to require continuation of programs/plans that have been developed, and ensure consistency."

ECO Comment

Depending on the final section 11.4 *EAA* submission policy approved by MOE, the results of this *EBR* review can be considered an environmental success story.

In this case, the applicants resorted to using the *EBR* after finding that their 2003 letter-writing campaigns were ineffective in eliciting a response from MOE. The applicants provided detailed supporting evidence, as well as a clear rationale for their requested policy and legal changes to section 11.4 of the *EAA*.

The ministry, for its part, made a good decision in agreeing to carry out a review under the *EBR*. MOE staff completed a thorough review of section 11.4, and should be commended for their detailed recommendations to strengthen the *EAA*. Since *EAA* approvals often are controversial, the new policy should help members of the public decide whether they want to file submissions under section 11.4 of the *EAA*. The proposed procedures are detailed and seem carefully designed to provide procedural fairness to all stakeholders with an interest in EA approvals that are subject to section 11.4 submissions.

As noted above, the applicants also requested that the *EAA* be amended so that time limits would be imposed on the minister when he or she is asked to conduct a review under section 11.4. Since subsection 11.4(4) of the *EAA* allows MOE to develop procedures for amending approvals to approved undertakings not covered by amending provisions or exemptions, it appears MOE decided it was not necessary to amend the *EAA* to provide explicit deadlines for responding to section 11.4 submissions. However, because the timelines outlined in the procedures will not have the force of law, submitters may be unable to file applications for judicial review in the event that the minister fails to respond to section 11.4 submissions within a specified period.

The finalized policy on section 11.4 should help fill a gap created by the *EBR* when it was proclaimed in 1994. Ontario residents are unable to file *EBR* applications for review on nearly all EA approvals because approvals issued under the *EAA* are not prescribed instruments under the *EBR*. While it is possible to file applications for review on specific prescribed instruments that are issued under the rubric of an EA approval or Class EA (such as permits to take water), most ministries have taken the position that section 68 of the *EBR* effectively prohibits their staff from conducting reviews of these instruments for five years unless applicants provide compelling scientific, economic, social or environmental evidence that wasn't considered at the time of the decision and would result in "significant harm to the environment." This is a tough standard for *EBR* applicants to meet. Consequently very few *EBR* applications for review on instruments issued under EA approvals are accepted by MOE and MNR.

The ECO doesn't necessarily agree with the restrictive interpretation of section 68 of the *EBR* currently being followed by the ministries. However, in the absence of a court decision indicating that the ministries have to follow a different approach, we expect that ministry staff will continue to reject applications for review on instruments that were approved as part of an EA undertaking and are filed less than five years after the instrument was issued.

One weakness of the current provisions of section 11.4 and the proposed submission procedure is that the provision only applies when construction or implementation of a decision has not yet started. Thus, Ontario residents will be unable to file submissions on EA approvals, even when the need for additional conditions is discovered, after the construction or implementation work has begun. Most proponents tend to begin work on undertakings approved under the *EAA* within six months or a year of the approvals being issued which will place pressure on potential submitters to file their section 11.4 submissions quickly before work has begun. The ECO notes the public still can file *EBR* applications for investigations in the event they learn of non-compliance with certain conditions contained in an instrument issued under an Act prescribed for investigations under the *EBR* such as the *Ontario Water Resources Act* or the *Fish and Wildlife Conservation Act*.

The finalized section 11.4 policy, when issued, should encourage more Ontario residents to file submissions for amendments to EA approvals. As noted above, amendment provisions are available in several approvals and approval processes issued under the *EAA* but not all of them. This policy ensures that a greater number of EA approvals will be subject to possible amendments, thus improving the quality of environmental planning in Ontario and allowing MOE and proponents to better mitigate potential effects on the natural environment. In addition, MOE's proposal to post its section 11.4 submission decisions on its EA website should allow stakeholders, members of the public and the ECO to track how the procedures are working.

Although MOE did not respond to the applicants' request that all future approvals issued under the *EAA* contain expiration or renewal dates, the ECO believes there are sound reasons to consider such a policy change. At the same time we recognize that implementing such a policy may be a complex legal undertaking and likely would require amendments to the *EAA* and its regulations.

The ECO will continue to monitor developments with respect to finalizing and implementing this policy and may report on this in a future Annual Report. As of July 27, 2009, MOE still had not posted a decision notice.

Review of Application R2006024:

5.2.6 Review of the Need for Regulatory Reform related to Mining Projects (Review Denied by MOE)

Background/Summary of Issues

In December 2006, an application was submitted that requested a review of the regulatory framework for mineral development, as it applies to the *Mining Act* and the *Environmental Assessment Act (EAA)*. This application for review was sent to the Ministry of the Environment (MOE), Ministry of Northern Development and Mines (MNDM), and the Ministry of Natural Resources (MNR). In February and April 2007, MNR and MNDM respectively denied this *EBR* application. Approximately a year and half after it received this *EBR* application, MOE also denied it.

The applicants stated that the current situation with respect to the assessment of the potential environmental impacts of proposed mining projects is uncoordinated, resulting in exemptions and a "piecemeal assessment" of potential environmental harm under the *EAA*. The applicants asserted that although mining projects may require a number of approvals for activities related to mining projects – such as approvals for energy generation, road construction and permits to take water – there is usually no individual environmental assessment (EA) conducted for the entire project. The applicants also asserted that it is necessary that environmental assessments evaluate the ecological impact of mining projects in their entirety, from staking to reclamation and remediation, prior to any approvals.

The applicants requested that the regulatory regime be reviewed, with the broader intent to ensure that comprehensive land use planning legislation for the north is enacted and implemented. They stated that there is no mechanism by which the Ontario government assesses, evaluates and then determines which ecosystems and cultural values should be "off limits" prior to permitting staking or mineral exploration. The applicants believe that the existing regulatory structure treats public land as freely open to exploration and, consequently, the integrity of ecosystems is not a consideration at the staking and exploration stage of mining activities. They argued that this approach affords inadequate protection for habitat for species at risk, lands to support Aboriginal harvesting rights, and areas deemed necessary to protect sources of water. The applicants assert that this approach is in conflict with the respective Statements of Environmental Values (SEV) for MNDM, MNR and MOE.

The applicants requested that all approvals of mining projects, including staking and exploration, in northern Ontario should "be halted until such time as comprehensive land use planning legislation is enacted and implemented." They believed that new land use planning legislation, such as a "Northern Planning Act," should be established that provides landscape-level land use goals and enables community-led land use planning for the north, consistent with the landscape goals. The applicants believe that landscape-level goals are required to ensure the northern boreal forest and wide-ranging species at risk are adequately protected. Under such a system, they argued that mining projects should be comprehensively assessed with respect to the ecological footprint for mining projects in their entirety prior to any approvals.

This *EBR* application is discussed at length in the Supplement to our 2006/2007 Annual Report (pages 218-225). It was also generally discussed in our 2006/2007 Annual Report (pages 51-74), in which the ECO recommended that "MNDM reform the *Mining Act* to reflect the land use priorities of Ontarians today, including ecological values." The ECO also discussed an *EBR* application related to reforming the regulatory framework for mining in our 2007/2008 Annual Report (pages 147-149).

The ECO notes that our 2007/2008 Annual Report (page 162) discussed MOE's use of the Environmental Registry with respect to approvals related to mineral development. The ECO reported that MOE did not allow public comment or appeal rights when it issued a series of approvals under the *Environmental Protection Act* and the *Ontario Water Resources Act* related to a specific new mine in 2007. At the time, MOE reasoned that the consultation undertaken during a recent federal comprehensive study, completed in accordance with the *Canadian Environmental Assessment Act* (*CEAA*), was an equivalent process to that required by the *EBR*. The ECO disagreed as these particular instruments were not explicitly considered during the federal comprehensive study and that the *EBR* does not have specific exemptions related to *CEAA*. In 2008, for the same mine site, MOE reversed its position and properly used the Environmental Registry for several new approvals.

Ministry Response

In June 2008, MOE denied this *EBR* application. The ministry concluded that the public interest did not warrant a review and that "adequate environmental protection measures are in place." MOE stated that mineral development is already subject to a variety of statutes and environmental assessment processes. The ministry stated that most projects in the far north are already subject to one or more of the following mechanisms under the *EAA*:

- Environmental Screening Process under the Electricity Projects Regulation (O. Reg. 116/01) (e.g., some energy generation and transmission lines);
- MNR's Class EA for Resource Stewardship and Facility Development Projects (e.g., access);
- Class Environmental Assessment for Minor Transmission Facilities (e.g., transmission lines);
- MNDM's Declaration Order for Dispositions of Crown Resources (e.g., land dispositions); or
- Individual Environmental Assessment requirements.

MOE stated that projects also may require various other approvals under different statutes. For example, projects may require certificates of approval under the *Environmental Protection Act* and permits to take water under the *Ontario Water Resources Act*.

The ministry asserted that these regulatory mechanisms require the consideration of all social, economic, and scientific evidence. Further, MOE stated that the Canada-Ontario Agreement on Environmental Assessment Cooperation serves to coordinate provincial and federal environmental assessment processes. With regard to a recent federal comprehensive study for a new mine in Ontario, MOE stated that, "The process was successfully streamlined with a one-window approach on this project through MNDM with provincial involvement from the MOE, the MNR and the Ontario Energy Board." Moreover, the ministry stated that MNR, not MOE, is the lead ministry for land use planning in the far north.

MOE was required to provide notice of its decision on whether it intended to conduct a review to the applicants and to the ECO by March 4, 2007. On April 4, 2007, MOE wrote to the applicants and the ECO that it was "delayed in making a decision on this issue." The ECO subsequently raised the issue of this delayed application on numerous occasions with MOE staff. In the Supplement to our 2007/2008 Annual Report, the ECO stated that it had "serious concerns that MOE is systematically thwarting the application for review process contained in the *Environmental Bill of Rights*" as illustrated by the ministry's handling of this *EBR* application.

ECO Comment

The ECO disagrees with MOE's decision to not conduct a review. As discussed in our 2007/2008 Annual Report, the ECO raised serious concerns with MOE's approach to environmental assessment:

The problem is that MOE has been very hesitant to support EA approval conditions that venture beyond the minimum *status quo* standards set out in other environmental legislation.... Public unhappiness with weak consultation is often exacerbated by related failings, such as flawed EA studies, and blocked public input on front-end questions of need or back-end technical details in permits and approvals.... There is also work needed to better integrate EA processes with land use planning and other planning processes.

With regard to land use planning in the far north, it is unfortunate that MOE appears to have cast itself in the role of administrator of the *EAA*. The ECO believes that MOE should move beyond simply functioning as an item-by-item approvals body. The public rightfully expects the ministry to take more of a big-picture approach to environmental protection in Ontario.

The ECO also believes that MOE has yet to hold MNDM properly to account for the environmental assessment process related to mineral development. MNDM has an interim Declaration Order allowing it to dispose of Crown resources, such as issuing mining licences and administering the *Mining Act*, without being required to conduct individual environmental assessments. Originally approved as a one-year interim order in 2003, it has been extended numerous times and now expires in December 2012. It is not reassuring that MOE has repeatedly extended this interim Declaration Order based on MNDM's failure to prepare the required class EA.

Review of Application R2006033:

5.2.7 Application for Review of Ontario's Policies to Address Open Burning in Urban Environments (Review Denied by MOE)

Background/Summary of Issues

On March 22, 2007, two individuals filed an application requesting that the Ministry of the Environment (MOE) review Ontario's air policies with respect to the issue of open burning. The applicants maintained that open burning of firewood, brush, leaves, etc. in urban areas (e.g., in recreational chimineas) creates a health hazard, both locally (especially through high particulate levels) and regionally (by contributing to smog). They claimed that open burning in general produces local emissions in excess of the standards set out in Ontario Regulation 419/05, made under the *Environmental Protection Act (EPA)*. The applicants also state that open burning produces prolonged exposures to several pollutants at levels that exceed the Canada-Wide Standards (CWSs) for those substances. They argued that these emission levels constitute an adverse effect and therefore open burning in urban areas fails to comply with section 14(1) of the *EPA*.

To support their argument, they used dispersion modeling software approved under O. Reg. 419/05 to show that open burning in an urban setting produces air pollution levels at nearby houses that exceed the regulated standards. They also compared the pollutant levels generated by the model with CWSs for pollutants such as $PM_{2.5}$ (particulate matter smaller than 2.5 microns), showing them to be in excess of these standards as well.

To illustrate the inadequacy of current regulation, the applicants pointed out that the Ontario Fire Code (a regulation made under the *Fire Protection and Prevention Act, 1997*) prohibits open burning unless a permit is issued but gives municipalities the authority to create by-laws that allow permits for open burning under prescribed conditions. However, these prescribed conditions are based on fire safety only; municipalities are not required to take environmental criteria into account when creating or enforcing their by-laws. As a result, some Ontario municipalities, such as Toronto, prohibit open burning completely

(with the exception of barbeques), while others allow it without any consideration of the environmental impacts. A recent survey by Environment Canada found that about two-thirds of Ontario municipalities have put open-burning by-laws in place. Municipalities have other options as well. Section 128 of the *Municipal Act* authorizes municipalities to regulate public nuisances, and section 129 authorizes municipal regulation of odours, which includes wood smoke from open fires. In addition, section 128(2) states that courts may not review such decisions, made by a municipal council in good faith. This grants considerable discretion to municipal councils in deciding how they want to regulate open fires.

The applicants expressed a concern that municipalities are regulating this activity based on legal authority that is not environmental in intent and that open burning should be under provincial environmental authority. They proposed that a review by MOE would result in either an outright ban on open burning in urban areas. Alternatively, they felt it could result in new restrictions, such as open burning permits with minimum separation distances or the requirement to use devices that meet the Canadian Standards Association (CSA) National Wood Stove Standard.

Ministry Response

On June 18, 2008, more than a year after the promised decision date, the ministry indicated that it would not conduct the review. The decision was based on the ministry's conclusion that "the potential for harm to the environment is minimal if the review applied for is not undertaken" and that "the scientific evidence submitted does not suggest an adverse effect or emissions in excess of the current standard would occur in the circumstances modeled." The ministry's specific reasons for this conclusion can be summarized as follows:

- The ministry stated that the scientifice evidence presented did not suggest that, in the circumstances modeled, open burning would result in emissions in excess of the standards set out in O. Reg. 419/05, as claimed by the applicants; nor did the evidence suggest that, again in the circumstances modeled, open burning would create emissions that exceed the CWSs for pollutants such as PM_{2.5}. The ministry pointed out that the air-dispersion modeling was not done correctly, in that the applicants did not take into account the turbulence factors that would be created by the existence of multiple houses in the urban area. The ministry stated that, had the applicants done the dispersion modelling properly, the results of the modeling would have shown levels that were not in excess of the O. Reg 419/05 standards;
- The ministry also pointed out that a municipal by-law permitting open burning does not override the *EPA* or its regulations. If open burning causes an adverse effect or exceeds emissions standards, MOE could still prosecute;
- With respect to smog, the ministry stated that the applicants' argument that open burning in general violates the CWSs for several pollutants is not valid. CWSs are regional-average standards and not meant to be compared to a point source, such as an open fire;
- In terms of local regulatory controls, the ministry argued that municipalities can choose to prohibit open burning and some have done so (e.g., Toronto), while others have allowed open burning under prescribed conditions; and
- With respect to the need for a review process, the ministry pointed out that there are several mechanisms already in place. One is the Ontario Smog Alert Response Guide; another is the Intergovernmental Working Group on Residential Wood Combustion, an Environment Canada initiative in which MOE participates; and a third is the GTA Clean Air Partnership. These processes allow considerable opportunity for MOE to periodically review and assess this issue.

Other Information

There are two related cases written up in previous ECO Annual Reports. One was an application for investigation submitted by two residents who were bothered by wood smoke from a neighbour's sauna (2004/2005 Annual Report, pages 295-297). The other was an application for investigation submitted by residents whose neighbours burned their unusable tobacco leaves every fall (2003/2004 Annual Report, pages 140-141). In both cases, the ministry decided to investigate and eventually acted to stop the

emissions. Considered in the context of the current decision not to review the policy and regulations dealing with open burning, these cases would seem to support the ministry's position that the current system provides recourse for individuals who make a complaint about wood smoke under the *EPA*.

ECO Comment

In general, the ministry's approach seems reasonable and its justifications for not reviewing open-burning policies and regulations seem valid. This ministry makes the following points: first, that the CWSs to which the applicants refer are not meant to be direct indicators of air quality based on individual source emissions, but rather averages over time; second, that section 14 of the *EPA* takes precedence over all municipal by-laws, so that MOE can act on open burning complaints if the situation so warrants; and third, that MOE is involved in a number of on-going activities that will provide future opportunities to address open burning.

One less convincing point was the ministry's specific response to the applicants' data generated by the air dispersion model. The ministry stated that the applicants' failure to include the effects of turbulence caused by the houses in the neighbourhood nullifies the findings. This statement may be valid, but there is no indication that the ministry re-modeled the data correctly in order to reach its stated conclusion that under this revised analysis the concentrations would not exceed air quality standards. The ministry's response would have been more reassuring to the applicants (and to the ECO) if it had it confirmed that the results had been re-calculated using the more accurate method.

In addition, two areas remain a concern to the ECO. First and foremost is the delay in the response. The process took more than one year. The original application was sent to the ministry on March 22, 2007. The ministry acknowledged its receipt on April 12, 2007, and promised a decision by May 22, 2007. In a letter dated May 25, 2007, they apologized for the delay and promised a decision by June 29, 2007. No further correspondence was received by the applicants until the actual decision, which was dated June 18, 2008, more than one year after the original deadline. This continues a pattern of delay that was pointed out on several occasions in the Supplement to our 2007/2008 Annual Report and is of great concern to the ECO.

Secondly, as the ministry points out, the *EPA* remains in force and takes precedence over any municipal by-law. Theoretically, this means that an Ontario resident who feels an incident of open burning is causing an adverse effect can ignore the fact that the burner has a municipal permit and make a complaint to MOE. This suggests at least two potential problems:

- The ministry might automatically refer the matter back to the municipality, frustrating the complainant, who would not have their environmental concerns addressed; and
- If the ministry does act, the person with the permit might feel misled by the municipality, who told them that they were allowed to burn legally.

Although the ministry did not mention it in its response to the applicants, an MOE staff member had been working with The Clean Air Partnership's Fireplace Code Advisory Group on a Municipal Code of Practice for Indoor and Outdoor Fireplaces including Open Air Burning in Ontario since early June, 2008. A final draft of this document was sent to the applicants in March, 2009, about nine months after their application for review had been refused. The proposed Code of Practice provides municipalities with a model set of conditions from which each municipality can draw to create or to modify an open-burning by-law. The Code starts with a general prohibition of open burning unless permitted by the municipality and includes in its proposed stipulations a statement regarding the primacy of the *EPA* and the consequent requirement not to create an adverse effect (the latter is also defined). The Code also recommends that municipalities adopt a program for either voluntary or mandatory burning bans tied to air quality advisories issued by MOE. These bans would be announced to the public by municipalities via the media as part of the Ontario Smog Alert Program.

The ECO supports this proposed Code of Practice, which is in fact a comprehensive approach to all types of residential burning (e.g., fireplaces, wood stoves, agricultural burning, etc.), and goes well beyond the

subject of open burning in municipalities. The proposed Code of Practice would certainly prevent or mitigate the potential jurisdictional problems outlined above. However, in retrospect, the ECO finds the MOE response to the applicants to have been somewhat disingenuous, and unnecessarily so. At the same time that the ministry was telling the applicants that their evidence "is not persuasive that open burning in urban environments is an urgent and significant concern", they were entering into a review process very similar, if somewhat broader, than that requested by the applicants, albeit as part of a partnership rather than as an MOE initiative. Furthermore, a number of the applicants' concerns (e.g., potentially harmful PM_{2.5} emissions), which MOE concluded in their written response were not adequately supported by the evidence in the application, are identified in the proposed Code of Practice as issues of serious concern and as the justification for the increased control of open burning practices recommended by the Code's authors. The ECO suggests that the ministry could have been more open in their response to the applicants and could have taken the more straightforward approach that the applicants' concerns were valid and would be addressed in a timely manner through the work of the Clean Air Partnership.

Finally, with respect to the concern that MOE will automatically refer open burning complaints back to municipalities, the reader should note that in 1997 MOE developed its Procedures for Responding to Pollution Incident Reports (PRPIR), (see our 2000/2001 Annual Report, pages 76-77). These were explicit guidelines developed to aid MOE staff in deciding which environmental problems will receive a response from MOE, and which will be referred elsewhere. The PRPIR guidelines suggested that MOE staff should refer certain callers and complainants to municipalities and other agencies if the activity is one that is not considered a priority. Non-priority activities at that time included residential noise (e.g., idling cars), odour (e.g., roof-tarring), or smoke (e.g., from barbecues, fireplaces or wood stoves). While the current status of the PRPIR at MOE is unclear, it would be beneficial to all parties if MOE's policies with respect to open burning were clearly stated, either as part of the new Code of Practice document, or as part of a revised PRPIR referenced within it.

Review of Applications R2007007, R2007008 and R2007009:

5.2.8 The Need for Municipal Climate Change Adaptation Strategies (Reviews Undertaken by MOE, Denied by MMAH and MNR)

Background/Summary of Issues

The applicants submitted this application to the ECO on April 12, 2007. They contended that there is a need for legislation that requires municipalities to put in place climate change adaptation strategies, particularly with regard to stormwater infrastructure. They felt that this is particularly urgent given that Ontario's stormwater infrastructure is aging.

In addition to providing background information on climate change and adaptation research, the applicants provided four principal reasons why the ministries identified – Environment (MOE), Natural Resources (MNR), Municipal Affairs and Housing (MMAH) – should undertake the review:

- Global climate change is influencing weather patterns in North America. This climatic variability is causing more frequent extreme weather events to occur. As a result there is increased pressure on municipal stormwater infrastructure and an increased risk of economic losses from flooding to the province as well as the private sector.
- 2) Management of stormwater infrastructure in Ontario currently is based on "best management practices," which only large municipalities have the economic means to undertake. The applicants noted that MOE's Stormwater Management Planning and Design Manual 2003 is a guidance document for municipalities and urban developers to consult and that there is no legal requirement to follow the guidelines. They felt that those municipalities that can afford to follow the manual's guidance will do so, but those that can not afford to do so will not. This means

some municipalities will have inadequate stormwater infrastructure to deal with the heavier precipitation events expected as a result of climate change.

- 3) The applicants claimed that there is no standardization of stormwater infrastructure for municipalities; and also that existing stormwater infrastructure may be inadequate to accommodate the changing climate.
- 4) Damage already caused to local infrastructure has shown the weakness in existing stormwater management systems in Ontario and the resulting economic costs. The applicants cited the July 2004 rainfall event in Peterborough, which led to extensive flooding, and also the August 2005 rainfall event in the northern half of the City of Toronto. The latter cost the City of Toronto and residents approximately \$500 million in repairs.

Ministry Response

Ministry of Natural Resources:

MNR denied this application in a letter dated June 25, 2007, stating that the requested review was beyond MNR's mandate and that:

- Municipal stormwater infrastructure is a municipal responsibility and stormwater design and planning direction is led by MOE;
- 1. The *Planning Act* provides the legislative tools to allow municipalities to implement stormwater management for new development and the Provincial Policy Statement provides general policy guidance on matters of provincial interest, both of which are the responsibility of MMAH:
- The Conservation Authorities Act provides for regulations for the control of development in areas such as river valleys and wetlands; and
- The potential effects of climate change still require assessment.

Ministry of Municipal Affairs and Housing:

In a letter dated July 5, 2007, MMAH informed the applicants that it had denied the application, and provided reasons. The ministry reported that the improved *Planning Act* will assist municipalities in the management of climate change, for example, by providing municipalities with new powers to include sustainable design elements through the site plan control process. MMAH wrote that this could be used to better control the effect of the possible consequences of climate change.

The *Planning Act* also contains provisions that: require municipalities to have regard to flood control when considering plans of subdivision and consent applications; empower municipalities to apply site plan control conditions pertaining to stormwater; and require municipalities to make decisions consistent with the Provincial Policy Statement provisions dealing with stormwater management practices to minimize stormwater volumes.

MMAH also reported that the technical guidance and direction suggested by the application was beyond the scope of the *Planning Act* and that MOE and MNR, along with conservation authorities, provide technical guidance and direction to assist municipalities to regulate stormwater.

Ministry of the Environment:

On February 26, 2008 (approximately eight months after the date required under the *EBR*), MOE informed the applicants and the ECO in a letter that it was undertaking the review and that it should require up to 24 months to complete.

Because of MOE's lengthy estimated timeline to complete the review, ECO staff wrote to MOE in October 2008 to request an update on MOE's progress. On March 26, 2009, MOE staff made a presentation to ECO staff about the status of its review. MOE staff reported that the ministry had established a partnership with MNR, MMAH, municipalities, conservation authorities, academics and others to consider what policy changes may be needed to the Stormwater Management Planning and Design Manual 2003

and other guidance. MOE noted that consideration must be given to both stormwater quality and quantity, and that source controls must be an important part of any solution. MOE acknowledged the uncertainty in predicting the impacts of climate change in the future, and the corresponding challenge for municipalities in designing stormwater solutions that are big enough to accommodate future storm events without wasting resources.

ECO Comment

The ECO believes that it is appropriate that MOE undertake this review as the matter is environmentally significant and MOE is the ministry with the greatest degree of authority and expertise in this matter. The ECO is pleased with the progress that MOE has made with its review, and that MOE is making solid, substantive efforts to address the important questions raised by the applicants.

The ECO will provide a full review of ministry handling of this application once MOE has completed its review.

Review of Applications R2007010:

5.2.9 Review of the Need to Protect the Paris Galt Moraine (Review Undertaken by MOE)

Background/Summary of Issues

In May 2007, an *EBR* application was submitted that requested a review of the need for a new policy or statute to protect the Paris Galt Moraine and its function as a groundwater recharge area in the Grand River watershed. This *EBR* application was forwarded to the Ministry of the Environment (MOE), the Ministry of Natural Resources (MNR), and the Ministry of Municipal Affairs and Housing (MMAH). MNR and MMAH denied this *EBR* application. In July 2007, MOE agreed to undertake a review and to provide a report within 18 months. By mid-April 2009, MOE had not released its report.

The applicants stated that municipalities within the Grand River watershed, such as Guelph, Cambridge, Kitchener and Waterloo, are largely dependent on groundwater resources to supply their municipal drinking water. The applicants also noted that these four municipalities are all designated as growth areas in the Growth Plan for the Greater Golden Horseshoe under the *Places to Grow Act*. The applicants stated that it is critical to protect the Paris Galt Moraine as a groundwater recharge area as "growth areas will shortly encroach into the moraine." The applicants also stated that "provincial policy leadership is required in analyzing the extent to which the cumulative effect of aggregate extraction negatively impacts groundwater recharge in the moraine areas."

The applicants stated the "inter-jurisdictional complexity of protecting the Paris Galt Moraine warrants provincial leadership in protection policy." Due to the geographic size of this system of moraines, the applicants stated that the area requiring protection is more extensive than the municipal source water protection areas as contemplated in the *Clean Water Act*. The Paris Galt Moraine extends over parts of Peel Region, Halton Region, Wellington County, the City of Guelph, the City of Hamilton, the Region of Waterloo and Brant County. Four different conservation authorities – the Grand River Conservation Authority, Credit Valley Conservation, Conservation Halton and the Hamilton Conservation Authority – also have sections of this system of moraines within their boundaries.

This application was previously written up on pages 138-142 of the ECO's 2007/2008 Annual Report, as well as on pages 259-262 in the Supplement to that report.

Ministry Response

In July 2007, MOE agreed to undertake this *EBR* review and to provide a report within 18 months. However, the ministry stated that the *Clean Water Act* itself will not be part of this review. Further, MOE stated that this review will not affect current planning decisions and that all existing ministry policies will continue to apply during the review period. The ministry also stated that the 2005 Provincial Policy Statement and the Greenbelt Plan would not be part of this review.

ECO Comment

The ECO commends MOE for undertaking this review. This application is similar to another *EBR* application that the ministry is undertaking related to the Waterloo Moraine. These *EBR* applications highlight several long-standing concerns of the ECO with Ontario's land use planning system. The ECO will complete its review of this application when MOE releases its report.

Review of Applications R2007014 and R2007015:

5.2.10 Review of the Need to License, Accredit and Monitor Waste Testing Laboratories (Reviews Denied by MOE)

Background/Summary of Issues

On August 9, 2007, the ECO received two related applications requesting changes to how waste testing is regulated and managed. The applicants recommended that landfill sites be required to test incoming registered wastes to confirm that they have been correctly characterized, and that laboratories that test registered wastes be licensed, accredited and monitored. The applicants described nine incidents at the Warwick landfill site in which confirmatory testing of incoming wastes, i.e., contaminated soils, revealed that they had been incorrectly characterized as non-hazardous waste by the generator. The applicants were concerned that other non-hazardous waste landfill sites may be unknowingly receiving hazardous or prohibited wastes in violation of their Certificates of Approval (Cs of A) and have unknowingly introduced potential environmental, occupational health and safety issues. The applicants believed that, since inconsistent methods of sampling and/or testing may have caused the discrepancies in the testing results, laboratories involved in such incidents should be monitored.

In the application R2007014, the applicants requested a review of the need to amend R.R.O. 1990, Regulation 347 – General – Waste Management (Reg. 347), made under the *Environmental Protection Act (EPA)*. Under Reg. 347, generators of waste are required to correctly characterize their wastes and, if their wastes meet certain criteria, to register those wastes with the Ministry of the Environment (MOE). Laboratories that test wastes for Reg. 347 do not need to be licensed or accredited. Cs of A outline what types of wastes landfill site operators are allowed to accept and may include conditions on how to manage these wastes, such as confirmatory testing. The applicants requested that:

- Those involved in sampling and analyzing material for the purpose of waste registration be accredited and licensed for all parameters listed in Schedule 4, Leachate Quality Criteria, of Reg. 347 to ensure more consistent results and fewer discrepancies;
- All landfill sites be required to perform confirmatory testing upon arrival of registered wastes
 to ensure that non-hazardous waste sites are not accepting hazardous wastes. Confirmatory
 testing would ensure that incoming wastes are characterized correctly. It would also ensure
 that errors made prior to receipt of the wastes, such as during truck loading, material handling
 and/or shipping, do not result in hazardous waste being deposited in non-hazardous waste
 sites; and

• All landfill sites keep incoming wastes from different sources separated until the confirmatory testing results are known and accepted.

The applicants noted that confirmatory testing is an important quality control measure that is done at only some sites, creating an uneven playing field.

In the second related application R2007015, the applicants requested that MOE review the need for a new waste management policy establishing a mechanism to monitor sampling methods and laboratories that test wastes. According to the applicants, MOE should develop a database of incidents in which the results of waste testing at the generator differ from the results at the receiving landfill site. MOE would then be able to identify repeat offenders and take disciplinary action against laboratories that were consistently involved in such incidents. The applicants believe that laboratories would be more diligent in their sampling and testing of wastes if such a policy was in place.

As explained by the applicants, MOE does not accredit laboratories, which is done by a national laboratory association, and does not report infractions to the laboratory association. MOE explained to the applicants that it does not consider incompatible lab results as a violation and has no means of connecting incidents of inconsistent lab results since it logs incidents by site and company, not by laboratory performing the testing.

As evidence to support their requests for review, the applicants described nine instances in which confirmatory testing requested by the Warwick landfill site of incoming contaminated soils produced different results than those provided by the generator of the wastes. In eight instances, the generators had provided test results indicating acceptable levels of contaminants meaning that the contaminated soils could be used as daily cover. However confirmatory testing results indicated unacceptable levels of contaminants, often lead, meaning that the contaminated soils were, in fact, unsuitable for use as daily cover. The contaminated soils had come from multiple sources and together had been tested by a total of six different laboratories. In a ninth instance, the initial test results were correct but a shipping error had resulted in the wastes being delivered to the wrong landfill site.

The applicants noted that Fine Analysis Laboratories (FAL) had been charged in 2002 with falsifying certificates of analysis and that MOE had not been aware of any problems with FAL's test results until they were revealed by a former employee of the laboratory. In a letter dated June 20, 2006 to the applicants, MOE confirmed that it was not planning to create a database to track laboratories that provide false results although it will continue to track and follow-up on non-compliance with acts and regulations.

Ministry Response

On June 13, 2008, MOE denied both applications stating that "existing regulatory requirements and ministry procedures concerning waste testing, and inspection and abatement, and the current approach of laboratories voluntarily seeking accreditation are sufficient to ensure the waste received at landfills is acceptable." MOE noted that "amendments can be made to landfill Certificates of Approval if necessary to address any site specific concerns." MOE explained that Reg. 347 requires generators of hazardous or liquid industrial waste to properly classify and register their wastes, and that waste manifests be used during transportation and disposal of these wastes. MOE also explained that many commercial laboratories voluntarily obtain accreditation for environmental analysis from the Standards Council of Canada or the Canadian Association for Environmental Analytical Laboratories. MOE noted that it conducts proactive inspections of landfill sites and waste generators to monitor compliance with Reg. 347 and their Cs of A. During inspections, MOE staff may review past test results and MOE's Laboratory Services Branch may sample and test wastes. MOE advised that it follows up when test results are inconsistent.

MOE explained that the terms and conditions of the Warwick landfill site's C of A require that all loads of incoming wastes be inspected and be one of the approved types. The C of A also outlines the requirements for testing and handling of contaminated soils. In response to incidents at the Warwick

landfill site, MOE noted that they had been managed properly. MOE also noted that a dedicated MOE inspector will be established when construction begins on the expansion of the site.

Update:

In July 2008, two of the applicants advised MOE that it had misunderstood their application. They explained that their concerns did not apply to the Warwick landfill site but did apply to the majority of other landfill sites in Ontario because their Cs of A do not require testing of incoming waste materials. In its response, MOE continued to take the stance, according to the applicants, that current policies and procedures ensure that incidents are handled appropriately.

In November 2008, one of the applicants advised the ECO and others of MOE's refusal to require confirmatory testing, and monitoring, accreditation and licensing of laboratories. The applicant explained that there had been another six instances of incoming contaminated soil samples at the Warwick landfill site being incorrectly characterized by the generator. According to the applicant, two laboratories were responsible for incorrect results in seven of the 15 incidents at the Warwick landfill site. The applicant urged MOE to reconsider its stance and implement the measures outlined in the two applications.

ECO Comment

MOE failed to respond to the applicants' fundamental concern that the same wastes can be characterized differently by different laboratories. MOE failed also to explain why policy changes are not required to reduce the likelihood of conflicting test results and to detect and manage them when they do occur. Landfill site owners rely on waste testing results to determine which Reg. 347 and C of A requirements are triggered, and to provide important evidence to MOE inspectors and the public that the wastes have been properly characterized and of ongoing compliance with their legal obligations. MOE did explain that, under Reg. 347, generators are legally obligated to properly characterize their wastes and landfill owners, to accept allowable wastes only. However, MOE failed to acknowledge that inconsistent testing results can occur due to errors in sampling and testing, or due to different methods being followed.

Although under section 70 of the *Environmental Bill of Rights* (*EBR*), MOE is required to make a decision whether or not to undertake a review within 60 days of receiving an application, it took an additional eight months to respond to the applicants. The ECO considers MOE's slow response an abuse of the intent and purpose of the *EBR* to provide Ontarians with opportunities to better the environment in a timely manner.

Review of Application R2007018:

5.2.11 Review of MOE Policies or Regulations under the Safe Drinking Water Act, 2002 as they Relate to Inorganic Fluorides in Drinking Water

(Review Undertaken by MOE)

Background/Summary of Issues

In November 2007, two applicants requested that MOE review existing policies, regulations and standards (as well as the need for new regulations and policies) under the *Safe Drinking Water Act*, 2002 (*SDWA*) as they relate to the addition of inorganic fluorides (and any other accompanying contaminants) to drinking water.

Although Japan, China, 98 per cent of Europe, and some Ontario cities (e.g., Welland, Thorold and Dryden) have banned or stopped adding fluoride to drinking water, several municipalities in Ontario continue this practice. Most fluoridated communities in Ontario add hydrofluorosilicic acid (an inorganic fluoride) to their drinking water. The applicants assert that the "additions of toxic inorganic [vs. organic]

fluorides...with its accompanying contaminants such as inorganic arsenic and lead into our drinking water" have:

- resulted in increased contamination of groundwater, surface water and sewage effluent to water bodies and natural environments;
- caused significant harm to water bodies, ground water sources and the life therein; and
- caused harm to the health of certain subsets of the population, including babies, pregnant women, fetuses and the elderly.

Ministry Response

MOE agreed to undertake this review in February 2008. The ministry indicated that Health Canada, as secretariat to the Federal-Provincial-Territorial Committee on Drinking Water (CDW), is revising the technical support document for the Canadian Drinking Water Quality Guideline for fluoride and is expected to conduct a national consultation within the next two years. As of April 2009, Health Canada had prepared a consultation document but was awaiting approval from the federal government to initiate consultations.

MOE stated that the Government of Ontario participates on the CDW and will consider the applicants' comments before undertaking a provincial consultation via the Environmental Registry. MOE stated that this provincial consultation will coincide with Health Canada's national consultation. The ministry stated that comments received through the provincial public consultation, as well as material provided in the application, will be considered in setting new policies regarding fluoride in drinking water.

ECO Comment

The ECO will review the handling of this application once the ministry has completed its review.

Review of Application R2007025:

5.2.12 Review of two Certificates of Approval for Air Emissions issued to Poscor Mill Services Corp.

(Review Undertaken by MOE)

Background/Summary of Issues

In February 2008, applicants submitted a request under the *Environmental Bill of Rights* (*EBR*) that the Ministry of the Environment (MOE) review and revise two Certificates of Approval for Air Emissions (Cs of A) issued to Poscor Mill Services Corp. (Poscor). Poscor operates two open-air scrap yard sites which process highly variable scrap metal materials in Hamilton, Ontario. Poscor uses oxy-propane torches to cut large metal pieces (torch cutting) 16 to 24 hours a day on both sites. The process discharges variable particulate matter and metal emissions into the air. Poscor received approved Cs of A for both locations in August 2006. The applicants requested that the ministry review and revise the Cs of A to include a condition that each cutting area be enclosed and that necessary emission control systems be put in place for each location.

Certificates of Approval for Air Emissions:

A C of A is required under the *Environmental Protection Act (EPA)* for equipment, structures or processes, or the ongoing operation of any equipment, that may discharge a contaminant into any part of the natural environment. Applicants must prepare emission summary and dispersion modelling reports for a C of A, to demonstrate compliance with O. Reg. 419/05 (Air Pollution – Local Air Quality) under the

EPA. In addition, Cs of A are classified as instruments under the *EBR* and must be posted on the Environmental Registry for public review before MOE can issue an approval.

The City of Hamilton is considered one of Ontario's local "hot spots", an area where several types of heavy industry are clustered together. Poor air quality in Hamilton, appropriately nicknamed the "steel city," has been attributed to its local economy where steel and heavy manufacturing industries predominate. In past Annual Reports, the ECO summarized a few applications received to review other Cs of A in the Hamilton area such as the SWARU Incinerator (2001/2002 Annual Report, pages 123-126) and Dofasco's KOBM meltshop (2007/2008 Annual Report, pages 142-145).

Applicants Concerns:

The applicants were concerned "about the visible emissions problem at both sites" and stated that it must have been an oversight on MOE's part not to require appropriate emission controls for the [torch cutting] approved in Poscor's Cs of A (Air). The applicants stated that Environment Hamilton staff, residents of the area, members of the community, and consultants witnessed visible emissions from Poscor's two properties and supported this claim with photographic evidence. The applicants requested that MOE impose emission control requirements at Poscor's facilities similar to those in the Cs of A (Air) issued to a comparable metal cutting facility in Hamilton.

Ministry Response

On May 15, 2008, MOE agreed to undertake a review of both Cs of A issued to Poscor and the ongoing abatement efforts. The ministry stated that the review would be conducted in conjunction with a C of A application made by Triple M Metal Corp (which merged with Poscor on March 5, 2008) to install an indoor cutting area on a nearby property. MOE posted a proposal for a new C of A (Air & Noise) for Triple M's scrap metal recycling facility on the Environmental Registry in April 2008. Poscor verbally informed MOE that the new indoor cutting area would include emission controls and be used for some of the larger projects, which are currently being processed at Poscor's two outdoor sites.

In December 2008, MOE completed its review of Poscor's Cs of A. MOE staff from the Environmental Assessment and Approvals Branch and the Hamilton District Office participated in the review. The ministry stated that its review had two purposes:

- 1) "to assess the conditions set out in the Cs of A for the [two Poscor sites] and determine if amendments to the Cs of A were appropriate; and
- 2) to determine whether the ministry's ongoing abatement efforts are adequate or whether its overall abatement approach needs to be modified."

MOE Review of the Certificates of Approval:

MOE reviewed the Cs of A, supporting documentation, public concerns received and observations from an August 2008 site visit. The ministry found that:

- both sites contained significant sources of fugitive emissions, containing metals and suspended particulate matter;
- torch cutting created opacity issues of concern, due to the "nature of manual scrap yard torching operations, and the effect of meteorological influences on fumes emitted from the torching operations;"
- because of the nature of open scrap yards, onsite emission sources did not match Poscor's supporting information used as the basis for the issuance of the Cs of A;
- since open-air scrap yards process highly variable material on an as received basis, Poscor's emission estimation techniques and maximum operation scenarios may be difficult to maintain or enforce; and
- Poscor's best management practices (BMPs) plans to control fugitive emissions (a C of A condition) could be improved as well as new BMPs plans created to address the torch cutting opacity issue.

Upon concluding the review, the ministry proposed amendments to the Cs of A, which would "require Poscor to undertake source testing and use this information to update its Emission Summary and Dispersion Modeling report." Additionally, MOE stated that amendments to the Cs of A will require Poscor to develop and implement a BMPs plan to reduce fugitive dust emissions and impacts and to reduce fumes and opacity-related issues associated with torching activities.

Abatement Efforts:

In its review report, MOE provided a chronology of abatement efforts and action taken since December 2003, including site visits in response to complaints and scheduled inspections in the area. The ministry noted that six complaints were received from the public, mainly concerning emissions, noise and odour from Poscor's operations. The ministry outlined that Poscor has a history of non-compliance with conditions in its Cs of A, requiring MOE to issue both a Provincial Officer Notice and Order to the company. In both cases Poscor complied following their issuance. In other cases, MOE used less severe methods to address concerns, such as requesting Poscor to amend its BMPs plan to control dust and perform source testing of emissions. The report stated that in most cases Poscor complied with MOE's requests.

The following paragraphs provide a summary of key abatement efforts and action taken as outlined in MOE's review report.

After an inspection in March 2007 as part of MOE's strategy to abate fugitive dust emissions in Hamilton, MOE requested Poscor update its BMPs plan to summarize sources of particulate, including the torch cutting operations, and to formulate a plan to manage off-site migration of particulates. In September 2007 Poscor submitted a revised BMPs plan addressing fugitive emissions. Poscor's emission summary and dispersion modeling report indicated that there were no off-site health impacts from its torching operations.

During a September 2007 inspection in response to complaints received, MOE found that opacity exceeded the regulated allowance. MOE advised Poscor to conduct source testing and determine the levels of contaminants that it was emitting. In addition, MOE instructed Poscor to construct equipment to properly control emissions from the operation and seek to amend its Cs of A. Poscor responded with an application (made by Triple M Metal Corp) for a C of A to move its propane cutting operation to an indoor facility close by.

In response to complaints related to Poscor's torch cutting emissions in May 2008, MOE requested that Poscor develop a procedure or action plan to reduce the emissions and odours. Poscor then submitted a plan to MOE, including actions to reduce visible emissions (e.g., adding additional visual screening around the primary torching area). However, the plan did not include an apparatus to collect fumes and particulates, as previously recommended by MOE. In September 2008, MOE again suggested that Poscor use a portable machine to collect fumes and particulates from both torch cutting operations. In October 2008, Poscor indicated that it had purchased equipment that uses water misting technology to capture and remove particulates and fumes from torch cutting operations. Poscor advised MOE that it would evaluate the equipment and provide a report to MOE when available.

MOE determined that abatement action taken by the Hamilton District office of MOE with respect to emissions was "in accordance with the ministry's Compliance Policy." The ministry indicated that the Hamilton District office will continue to monitor the sites to ensure that Poscor's BMPs plan adequately addresses fugitive dust and visible emissions.

ECO Comment

The ECO commends MOE for undertaking a review of Poscor's Cs of A, particularly since both Cs of A were issued within the last five years. Under the *EBR*, ministries can deny an application for review of a decision (e.g., issuance of a C of A) made within the last five years, unless it is believed that failure to review could result in significant harm to the environment or evidence is presented that was not available when the decision was made. Ministries often use the 'five-year exemption' as a reason for denying a

review. The ECO is pleased that MOE considered the potential for harm caused by Poscor's emissions and determined that a review was appropriate.

The ministry conducted a thorough review of the application, involving staff from both the Environmental Assessment and Approvals Branch and the Hamilton District Office. However, the ECO is disappointed that MOE failed to meet the 60-day deadline established in section 70 of the *EBR* for informing applicants of a decision to review; MOE provided the decision one month after the deadline.

The ECO commends MOE's conclusion that Poscor's Cs of A should be amended to address this long-standing pollution problem. The ECO also applauds MOE's ongoing abatement efforts in response to complaints and scheduled inspections. However, as of March 2009, the amended Cs of A have not yet been posted on the Environmental Registry for public review. MOE advised the ECO that the C of A amendments are being reviewed. The ministry is evaluating information submitted by Poscor regarding equipment that uses water misting technology to capture and remove particulates and fumes from torch cutting operations. In addition, MOE informed the ECO that even if the corporation moves the torch cutting operations to the indoor facility, the ministry will continue with the process of amending the Cs of A for both outdoor torch cutting facilities to "ensure that all environmental impacts are properly addressed at the two ... sites should operations continue." The ECO reminds the ministry that it is required to post proposed C of A amendments on the Registry and consider public input when making its decision.

MOE's Compliance Policy (May 2007) provides guidance to staff in selecting abatement and enforcement tools to address alleged contraventions. The policy states that the ministry's response to an incident (i.e., using education and outreach, warnings, orders or prosecutions) should be proportionate to the severity of the incident. The ECO acknowledges the extent and range of abatement efforts taken by MOE staff to address Poscor's air quality issues and the ministry's commitment to continue to monitor the facilities for compliance.

Review of Application R2007026:

5.2.13 Review of a Certificate of Approval for a Sewage Treatment Plant (Review Denied by MOE)

Background/Summary of Issues

In February 2008, an application for review of a Certificate of Approval (C of A) for a private sewage treatment plant (STP) was filed. This STP was constructed as part of a new residential and commercial development near Thunder Bay that includes a subdivision of 120 lots (approximately 12 of which were built and occupied as of the time of the application), a golf course, a restaurant and a motel/hotel. The Ministry of the Environment (MOE) had issued a C of A for this STP in September 2004. The effluent from the STP is discharged into Kaministiquia River and sludge is transported to the Thunder Bay waste water treatment plant for further processing. The ECO forwarded this *EBR* application to MOE.

The applicants argued that this C of A should be reviewed, asserting that there was no public consultation on the STP prior to the issuance of the C of A. They also argued that the C of A was issued in violation of Procedure D-5-2 of the *Ontario Water Resources Act* (*OWRA*); the classification used for the C of A was incorrect; the lack of consultation with the Department of Fisheries and Oceans (DFO) resulted in a violation of the *Fisheries Act*, and there was no environmental impact study conducted for the subdivision. The applicants asserted that the application for the STP was not approved by a designated municipal authority and that it has not been shown that there will be no negative environmental impacts. They also argued that the public interest is 'high' rather than 'low to moderate' with respect to the level of consultation that was merited during the approvals process.

The applicants alleged that the application for the C of A required a public hearing under the *OWRA*. The *OWRA* requires that a mandatory public hearing be held for any sewage works that cross a municipal boundary. The *OWRA* also provides that the ministry may, at its discretion, require a hearing for any other sewage works that are of significant public interest. These provisions do not apply to sewage works that are already subject to the environmental assessment (EA) process. The applicants understood these provisions to mean that a mandatory hearing was a legal requirement for this STP. The applicants noted that the two public meetings that were referenced in the Environmental Registry posting for the C of A were held to comment on zoning changes and an Official Plan amendment, not to discuss the STP.

The applicants noted that one of the conditions of the C of A was that the "owner shall enter into a duly signed Responsibility Agreement with the Municipality of Oliver Paipoonge prior to the operation of the works." MOE's Procedure D-5-2 requires that such conditions be included in Cs of A for all private STPs that serve multiple residences to ensure that sewage services will continue to be provided by the municipality in the event that the private owner becomes unable to provide those services. The applicants alleged, however, that according to their interpretation of Procedure D-5-2, this condition is not permitted for residential subdivisions. The applicants also argued that, even if the condition is valid, it has not been met. The applicants included a letter from the Municipality of Oliver Paipoonge in their application that states that as of January 15, 2008, "there is no transfer agreement for the STP in place at this time."

The applicants expressed concern with the classification of the C of A, which affects the level of public consultation. They provided email correspondence from two different staff at MOE. One said that it was a Class I instrument and the other said that it was a Class II instrument. The applicants believed that it should have been a Class III instrument. A Class III instrument would be subject to greater public consultation.

The applicants alleged that DFO was not notified that treated sewage effluent was being discharged into the Kaministiqua River. The applicants alleged that this failure to notify DFO was a violation of the federal *Fisheries Act.* Moreover, the applicants noted that an Environmental Impact Study (EIS) was only completed for the golf course. The applicants alleged that an EIS should also have been required for the subdivision.

The applicants included documentation showing that the Municipality of Oliver Paipoonge is not listed in Appendix C (municipalities currently under the transfer of review program) of MOE's "Guide for Applying for Approval of Municipal and Private Water and Sewage Works." Municipalities included in Appendix C are authorized to review certain applications on behalf of MOE and to provide recommendations to the ministry for approval or rejection. The applicants argued that the Municipality of Oliver Paipoonge did not have the authority to approve the STP.

The applicants argued that it has not been shown that there will be no negative impact on a provincially significant wetland (PSW), the Kaministiqua River and fish habitat and that DFO and the Lakehead Region Conservation Authority (LRCA) did not review or comment on the STP. The applicants commented that the treated sewage effluent will be discharged into a pristine river that contains numerous fish, including sturgeon. The applicants also alleged that the Ministry of Natural Resources (MNR) only looked at the impacts of the golf course on the PSW but not at the impacts of the housing development and STP.

The applicants argued that public interest is 'high' rather than 'low to moderate' as stated by MOE. The applicants included the proximity to a provincially significant wetland, the fact that the Kaministiqua River is used for water sports, swimming and fishing and is home to a population of sturgeon, which are a species at risk, as evidence that this issue is of great public interest. The applicants suggested alternative options for treating the sewage generated by the development, including conveying the sewage to the Thunder Bay STP by truck or pipeline, or installing septic systems. Septic systems are the normal sewage treatment approach in rural areas near Thunder Bay.

Ministry Response

In April 2008, MOE denied this application for review. The ministry stated that public consultation did occur as part of the approval process for the development under the *Planning Act*. The ministry also noted that the application for, and decision on the C of A were posted on the Environmental Registry for public consultation. MOE also stated that the subdivision agreement between the developer and the municipality satisfied several of the requirements of Procedure D-5-2. The ministry had previously conducted an inspection of the site in December 2007 and found the STP was in compliance.

MOE stated that the developer received approvals for the development under the *Planning Act*. These approvals were in the forms of an Official Plan amendment, zoning by-law amendments and subdivision approval. According to MOE, these approvals required public consultation and included appeal provisions to the Ontario Municipal Board (OMB). MOE also stated, "Section A.2.9 of the Municipal Class Environmental Assessment allowed [the developer] to integrate the planning of the new sewage system with its *Planning Act* applications." According to MOE, the developer posted a Notice of Completion on July 21, 2004, that provided the public with an opportunity to provide comments. MOE also noted that the status of the project could have been elevated to an individual environmental assessment (Part II Order) if the public had environmental concerns that "remained unresolved."

The ministry pointed out that a proposal notice for the C of A for the STP was posted on the Environmental Registry on April 26, 2004, and the decision notice was posted on September 3, 2004. No comments or leave to appeal applications were received. The C of A was issued on September 1, 2004. MOE also explained that "a mandatory hearing is required under section 54 of the *OWRA* when a sewage works extends from one municipality into another." This was not the case with this STP as it is servicing a property that is entirely within Oliver Paipoonge.

MOE referenced condition 11(1) of the C of A which states that "in accordance with the ministry Procedure D-5-2 entitled 'Application of Municipal Responsibility for Communal Water and Sewage Services', the Owner shall enter into a duly signed Responsibility Agreement with the Municipality of Oliver Paipoonge prior to the operation of the Works approved herein." The ministry considers the signed subdivision agreement between the Municipality of Oliver Paipoonge and the developer dated July 9, 2004, coupled with the ministry's abatement powers, to adequately protect the environment. MOE does, however, state that, "...the subdivision agreement does not satisfy all the elements outlined in the Procedure [D-5-2]..." According to MOE, the agreement provides conditions for the transfer of ownership from the developer to the municipality when "certain conditions have been met." MOE states that they have followed up with the municipality and the municipality has committed to share the agreement with interested parties.

According to the ministry, the C of A was properly classified as a Class II instrument. MOE goes on to state that "The ministry posted the Proposal Notice on the Environmental Registry prior to being informed that the King George's Park had been developed under the Municipal Class EA. This resulted in additional public consultation on the King George's Park."

MOE stated that no consultation was required with DFO because the LRCA was authorized to review the impacts on fish habitat on behalf of DFO. Additionally, MOE stated that an EIS was not required because the potential impacts of the STP were reviewed through the *Planning Act* and Municipal Class EA process. The agencies had an opportunity to review a Municipal Services (Sewage) Feasibility study prepared by the developer and provided comments.

The ministry confirmed the applicants' statement that MNR reviewed and signed off on a study that looked at the impacts of the golf course on the PSW. In addition, MOE stated that, "There is no requirement in the *OWRA* for the Issuing Director to consult with other agencies before a C of A is issued." MOE also pointed out that correspondence from DFO to the applicants makes the comment that DFO does not have legislative authority that covers STPs.

MOE noted that the public had numerous opportunities to comment on the proposed development and that the ministry "applies similar levels of compliance requirements to all sewage treatment facilities that discharge into waterways in the province."

Other Information

In February 2009, Thunder Bay City Council ratified a resolution that urged the provincial government to amend the legal notification requirements for certificates of approval for sewage treatment plants. The resolution recommended that all property owners and residents within one kilometre downstream of a proposed discharge point on a public waterway receive individual notice of the proposed certificate of approval. City Council forwarded this motion to the ECO, the Minister of the Environment, the Minister of Municipal Affairs and Housing, and the Minister of Northern Development and Mines.

ECO Comment

The ECO concurs with MOE's rationale to not conduct a review. MOE was able to clarify and confirm that the public had opportunities to comment as part of the approval process for the development, including consultation under the *Planning Act*. There was also an opportunity to comment on an Environmental Registry notice as part of the approval process of the STP. No comments were received in response to the Registry proposal. MOE also confirmed that the environmental effects of the STP were reviewed under the Municipal Class Environmental Assessment process, that public consultation requirements under the Municipal Class EA were met, and that no Part II Order requests (bump-up requests to an individual EA) were received by the ministry.

Nonetheless, the ECO appreciates the concerns of the applicants. The ECO is well aware that members of the public can find it very difficult to unravel the complex approval processes governing developments such as this one, involving numerous agencies at several levels of government. It can also be very challenging to track and participate in the available public comment opportunities, since the comment periods are often short and the notices are easily missed. The ECO has repeatedly raised concerns about inadequate and frustrating consultation processes under the EA regime, such as discussed in our 2007/2008 Annual Report.

More could have been done by MOE to answer outstanding questions from the applicants. On the issue of the responsibility agreement, MOE acknowledged that there had been "miscommunication on the issue of a subdivision agreement between the applicants and the municipality." MOE advised that the municipality had committed to share the agreement with interested parties.

There were discrepancies in the correspondence to the applicants about the classification of the instrument (C of A). MOE has confirmed that it is Class II, however, the applicants did receive an email from an MOE employee that erroneously referred to it as a Class I instrument. This added to the concern and confusion of the applicants.

The ECO is concerned that there was some confusion and a lack of coordination among the various agencies approving different aspects of the project. MOE stated that it posted the proposal notice for the STP prior to being informed that the project had been developed under the Municipal Class EA. The ministry also stated that MNR reviewed and signed off on the impacts of the golf course on the PSW but there was no mention of whether MNR reviewed the impacts of the subdivision and associated infrastructure on the PSW.

Communal sewage treatment and discharge of treated effluent to waterways is commonplace in southern Ontario, but it is not yet common in northern Ontario. It is understandable that residents of this area near Thunder Bay would assume that new developments should be serviced by private septic systems. However, there are good environmental reasons to prefer communal sewage treatment systems over septic systems. The ECO has written about the prevalence of malfunctioning septic systems in several past reports, for example in the 2001/2002 Supplement (page 258). After initial approval, most septic systems are not periodically re-inspected since there is no re-inspection requirement at the provincial level, and only a handful of municipalities run their own re-inspection programs. (See the ECO's

discussion of application for investigation I2008010 in this Supplement for a discussion of inadequate septic systems in the Blind River area.)

The advantages of communal sewage systems are recognized by the Ontario government, as reflected by the 2005 Provincial Policy Statement (PPS) under the *Planning Act*. Section 1.6.4 of the PPS sets out a hierarchy of sewage treatment options which favours communal sewage services over septic systems, and municipal planning decisions must be consistent with that hierarchy.

Review of Applications R2007027, R2007028 and R2007029:

5.2.14 Regulatory and Policy Reform Related to Methylmercury in Ontario's Boreal Forest (Reviews Denied by MOE, MNR and MNDM)

Background/Summary of Issues

In February 2008, two applicants requested a review of the need for regulatory and policy reform related to the formation, mobilization and accumulation of methylmercury in Ontario's boreal forest. The applicants stated that a review of the government's mercury regulatory regime is necessary since the current system has been "inadequate to prevent the contamination and mobilization of mercury in the boreal forest and to prevent the significant associated health and environmental risks associated with the bioaccumulation of methylmercury in fish." The applicants argued that the poor drainage and extensive wetlands of the boreal forest make it susceptible to mercury accumulation and that "...industrial development (that results in flooding or draining of these wet landscapes or clear-cutting) has a very high probability of releasing mercury into aquatic environments."

Sources of Mercury in the Environment:

Although mercury occurs naturally in the environment, the deposition of this metal as a pollutant has increased substantially due to human activities. In Ontario, the main anthropogenic sources of atmospheric mercury emissions are electric power generation, iron and steel production, incineration, and miscellaneous sources, including residential wood and fuel combustion and commercial fuel combustion.

Mercury has been used in a variety of products, including thermometers, barometers and electrical products (e.g., dry-cell batteries, fluorescent lamps and electrical switches), which can end up in landfills and release mercury to the natural environment. Furthermore, cavity fillings (often an alloy of silver and mercury) have historically been discharged from dental offices into municipal sewers, which can result in their incineration in sewage sludge or their application to agricultural lands, again resulting in the entry of mercury into the environment.

Until the mid-1990s, it was assumed that mercury in remote lakes was due largely to geologic sources. While natural sources undoubtedly contribute to lake mercury levels, research indicates that anthropogenic sources have approximately doubled the mercury levels of northern hemisphere lakes. The deposition of atmospheric mercury from anthropogenic emissions is a significant source of mercury even in remote lakes. Research suggests that increases in atmospheric deposition rates have caused increases in concentrations of mercury in freshwater fish.

The Mobilization and Methylation of Mercury:

The level of mercury in boreal freshwater ecosystems is affected not only by lake conditions (e.g., depth, acidity and the amount of organic matter in sediments) but also by activities on the surrounding land. Because mercury tends to associate with the upper organic layer of soil, major land use disturbances from industrial activities in water catchments that expose this layer can increase the rate of mercury movement to water bodies.

Once in the aquatic environment, bacteria can convert mercury to methylmercury, a form of mercury that is readily absorbed or ingested by aquatic organisms and retained in their lipid and muscle tissue. Because flooding releases mercury stored in submerged soil and peat, hydroelectric development increases the mercury available to bacteria for methylation and can elevate the concentration of methylmercury in water reservoirs by ten-fold or more. Methylmercury levels in water bodies may also increase when peatlands are partially drained, perhaps a result of an increase in substrate available to bacteria.

Effects of Mercury Exposure:

Because methylmercury is not readily eliminated from organisms, it accumulates in the tissues of aquatic organisms and increases in concentration up the food chain, reaching levels in the tissues of predatory fish and fish-eating birds and mammals much higher than in surrounding waters. Wildlife exposed to high levels of this most toxic form of mercury exhibit slower growth, reproductive failure and the development of abnormal behaviours that can affect survival.

Methylmercury is toxic not only to wildlife, but also to people. In adults, high levels of methylmercury can lead to personality changes, tremors, changes in vision, deafness, loss of muscle coordination and sensation, memory loss, intellectual impairment and in extreme cases even death.

Women of childbearing age, pregnant women, children and populations that depend on fish as their primary food source, such as First Nations communities, are most at risk of mercury exposure. One Ministry of the Environment (MOE) document from 1997 states that "[e]xtensive surveys of mercury levels in the blood of native peoples indicate that their burdens of mercury are indeed higher than non-natives, and that some have levels above the threshold for mercury toxicosis in the most sensitive individuals." Moreover, because mercury can cross the placental barrier, unborn children may receive mercury from their mothers, leading to neurodevelopmental problems (e.g., reduced coordination and growth, lower intelligence and seizures) in the child. MOE has stated that "studies suggest that even low levels of exposure can cause neurological and developmental impairment in the fetus and young child."

Mercury is listed as a "toxic substance" under the *Canadian Environmental Protection Act.* (See pages 116-121 of the ECO's 2003/2004 Annual Report for a discussion of the impacts of mercury exposure).

Government Measures to Minimize Mercury Exposure:

The Canadian Council of Ministers of the Environment (CCME), a body made up of federal, provincial and territorial environment ministers, has developed Canada-Wide Standards (CWSs) to reduce mercury emissions. The Ontario government has signed CWSs that set material-specific targets for cutting mercury emissions from waste dental amalgams and fluorescent lamps. Moreover, in February 2008, MOE approved the Municipal Hazardous or Special Waste program plan to improve the diversion of hazardous and special waste materials, like mercury, from landfills. The first phase of this program, which was implemented in July 2008, includes single-use dry-cell batteries. The second phase, which as of May 2009, has not yet been implemented, is required to include several more mercury-containing products: all batteries (excluding lead acid batteries from vehicles); fluorescent light bulbs and tubes; switches; and measuring devices (e.g., thermostats, thermometers and barometers).

In 2000, the Ontario government also endorsed CWSs to reduce emissions of mercury from base metal smelters and the incineration of sewage sludge and medical, hazardous and municipal waste. These standards are generally incorporated into facility Certificates of Approval (Cs of A). While Ontario has also signed a CWS to reduce mercury emissions from coal-fired power plants, the government has thus far been unable to deliver on this commitment, a result of its decision not to close Ontario's coal-fired power plants by 2007. (See Section 5 of this Supplement for a review of application R2006020). Ontario now legally requires the province's coal-fired power plants to be shut down by 2014, a measure that would considerably reduce the amount of mercury released into the atmosphere. (See Section 4.12 of the Supplement to the ECO's 2007/2008 Annual Report).

To provide health warnings to people who consume sport fish, the Ministry of Natural Resources (MNR) and MOE collect fish from lakes and rivers throughout Ontario and analyze them for a wide variety of

contaminants, including mercury. The results of this analysis are used to develop MOE's Guide to Eating Ontario Sport Fish, which uses health protection guidelines developed by Health Canada to offer species and size-specific advice on safe fish consumption. In 2007, MOE reported that mercury contamination is responsible for 85 per cent of the restrictions placed on the consumption of fish caught from Ontario's inland lakes.

The applicants asserted that a review is necessary for the following reasons.

The Province Lacks an Overarching Policy and Action Plan to Prevent Mercury Contamination: The applicants believe that "Ontario is without a policy to reduce mercury emission from industrial sources other than its delayed commitment to close down the coal-fired power plants in the province by 2014." Ontario's coal-fired power plants are responsible for approximately 20 per cent of the province's mercury emissions. The applicants therefore recommend that the province establish a comprehensive policy and action plan to prevent mercury emissions and contamination. The applicants also recommend: closing

Ontario's coal-fired power plants; banning the use of mercury in consumer products and industrial processes where possible; and establishing a recycling program for mercury-containing products.

The Province Inadequately Monitors the Release, Movement, Exposure, and Impacts of Mercury: The applicants believe that "the release of mercury into Boreal aquatic environments (as a result of forestry, mining and hydro development in addition to the burning of coal and processing of metals) is not being comprehensively monitored." The applicants point out that the ECO previously commented on the "need for careful monitoring and clear public reporting of mercury's impacts on Ontario ecosystems, including impacts on higher trophic levels, vulnerable species and sensitive ecosystem functions."

Furthermore, the ECO's 2003/2004 Annual Report recommended that "MOE establish a comprehensive program to develop an understanding of the pathways, movement and fate of mercury in Ontario ecosystems." The applicants argue that baseline data on environmental mercury levels are not being collected and considered in decision-making processes concerning the boreal forest, and that resources and staffing levels are inadequate to research the movement, transformation and bioaccumulation of mercury or to conduct compliance and effectiveness monitoring. Moreover, the applicants believe that the provincial government is insufficiently monitoring the mercury levels of people living in the boreal forest and the impacts of mercury exposure on wildlife populations and humans.

The Province Uses Outdated Guidelines and Policies that Inadequately Consider the Mobilization and Impacts of Mercury:

The applicants argue that Ontario's mercury guideline for the management of the quality and quantity of surface and ground waters is outdated and does not adequately protect aquatic life. Ontario's Provincial Water Quality Objective for mercury is 200 ng/L, a value less stringent than the freshwater quality guidelines set out by the CCME (26 ng/L for inorganic mercury and 4 ng/L for methylmercury). Moreover, the CCME warns that water concentrations of mercury above 0.2 ng/L may pose a risk to wildlife species and that water concentrations of methylmercury below 0.007 ng/L may be required to protect all wildlife species in Canada. The applicants point out that the supporting rationale for Ontario's 200 ng/L water quality objective comes from an MOE publication that is 30 years old.

The applicants also argue that while instruments that permit the release of effluent into the environment (Cs of A) may include conditions to prevent mercury contamination of a water body, Permits To Take Water (PTTWs) generally relate only to issues of water quantity, and so do not consider that lowering water levels may increase methylmercury levels. Likewise, the applicants stated that current forest management practices do not take into account the potential effect of logging on the mobilization and bioaccumulation of methylmercury in fish.

The Environmental Assessment (EA) and Permitting Process for the De Beers Victor Diamond Mine Project Overlooked the Potential Problem of Methylmercury:

In their request for review, the applicants referred to a previous application requesting reforms to the environmental assessment of mining projects under the *Mining Act* and the *Environmental Assessment Act* (*EAA*). In that application, the applicants argued that the federal and provincial approval processes

for the Victor Diamond Mine near Attawapiskat did not consider the issue of methylmercury formation and mobilization, resulting in increased levels of methylmercury in local fish. The applicants stated that "no authority required De Beers to conduct an assessment of methylmercury risks...and thus none was done as part of the federal EA, and the provincial EA was scoped such that it did not cover that aspect of the project." Although a consulting company acting on behalf of the community of Attawapiskat requested a risk assessment to consider the potential for changes in methylmercury, the mining proponent's consultant responded that a risk assessment is "unwarranted" and "that such discussion could be unnecessarily alarmist..."

The applicants argued that a review is also needed because provincial authorities approved PTTWs for the Victor Diamond Mine Project even though mercury contamination is now an acknowledged concern for the project.

MOE Does Not Believe that Mercury is an Inherently Toxic Substance:

In August 2002, the Sierra Club of Canada submitted an application for investigation alleging that Ontario Power Generation's (OPG) release of mercury from its coal-fired electricity plants contravenes section 30(1) of the *Ontario Water Resources Act* (*OWRA*) and sections 35(1) and 36(3) of the federal *Fisheries Act*. While the applicants of that application acknowledged it may be impossible to quantify the amount of mercury released that makes its way into Ontario waters, they argued that "mercury is toxic therefore the offence is complete when any amount of OPG's emissions of mercury enter our waters." The Sierra Club presented an extensive argument as to why mercury should be considered an inherently toxic substance under the *OWRA*. MOE disagreed and responded that "it is not clear that the quality and concentration of the OPG mercury air emissions are 'inherently toxic substances'..."

The applicants of the currently discussed application asserted that "there is strong argument, ased on ample scientific evidence, that mercury is indeed an inherently toxic substance for which a zero tolerance standard applies." They point out that MOE's published definition of "inherently toxic to humans" is "those substances that are known or suspected of having harmful effects on humans, including cancer, birth defects and damage to genetic material."

The ECO forwarded this application to MOE, MNR and the Ministry of Northern Development and Mines (MNDM) for review. The ECO also forwarded the application to the Ministry of Health and Long-Term Care (MOHLTC) and the Ministry of Aboriginal Affairs (MAA) as a non-prescribed matter. There is no obligation on the part of a ministry to acknowledge a non-prescribed review or communicate further with the ECO or the applicants.

Ministry Response

Ministry of the Environment:

On April 28, 2008, MOE denied the application for review. The ministry's two-paragraph response stated that MOE "has many current programs underway, as well as new initiatives which address the potential for mercury bioaccumulation in the boreal forest." The ministry stated that its comprehensive programs include:

- ongoing review and revision of environmental standards, guidelines and objectives for mercury and methylmercury;
- new regulations for controlling industrial mercury emissions to air;
- new waste initiatives to divert mercury from municipal waste and prevent it from entering the environment;
- monitoring for mercury and other toxic substances in the boreal forest environments;
- applied research in partnership with Ontario universities to better understand the sources, transport, fate and impact of mercury in Ontario's ecosystems; and
- the requirement of new industrial operations in the boreal forest to obtain and implement comprehensive conditions through Cs of A, a process that requires industries to assess potential environmental and human health impacts and design facilities to ensure they meet ministry requirements. The ministry stated that where there is uncertainty regarding the impact of

emissions or related land-use disturbance, such as the possibility of bioaccumulation of mercury in biota, MOE imposes comprehensive conditions in Cs of A (e.g., environmental monitoring requirements) to ensure that industry operations do not adversely affect human health or the natural environment.

Ministry of Natural Resources:

On May 15, 2008, MNR denied the application for review. The ministry responded that since MNR's mandate does not include setting standards for mercury levels in air, water or biota, its response to the applicants must necessarily focus on legal, regulatory and policy matters within MNR's mandate and authority – specifically policy and guidelines for forest management and water management related to waterpower development.

MNR asserted that a review is not warranted since "there is a sufficient legal, regulatory and policy framework, including guidelines, to ensure that current information and knowledge about mercury dynamics in the boreal forest is considered in land-use and resource management decisions." Moreover, MNR stated that "...as part of its adaptive management framework MNR is currently reviewing, updating and developing new policies and monitoring protocols for forest management activities and waterpower projects based on current, scientifically sound information on the environmental impacts of these activities."

In response to the applicants' concern that forest management practices fail to consider the effects of logging on methylmercury mobilization and bioaccumulation in fish, MNR pointed out that the *Crown Forest Sustainability Act* requires the use of forest practices that minimize adverse effects on plant and animal life and that a Declaration Order (MNR-71) under the *Environmental Assessment Act* provides coverage to forest management within the Area of the Undertaking (AOU).

MNR also mentioned several manuals and guides that direct forest management. MNR stated that three guides – the Forest Management Guide for Natural Disturbance Pattern Emulation, the Forest Management Guidelines for the Protection of the Physical Environment, and the Timber Management Guidelines for the Protection of Fish Habitat – are of particular relevance to concerns over mercury mobilization and that the latter two guides provide guidance to minimize soil and hydrologic disturbance associated with mercury mobilization. Moreover, MNR indicated that these two guides are being amalgamated into a single new Stand and Site Guide, which will include new information and guidance on the potential for hydrologic impacts during forest management and the potential for mercury mobilization. This new guide was posted on the Environmental Registry for public comment on November 27, 2008 (*EBR* Registry Number 010-5218).

MNR outlined how a variety of laws, regulations and policies govern the development and operation of waterpower facilities to minimize environmental impacts. In particular, MNR pointed out that the Aquatic Ecosystem Guideline, while focused on the impacts of flow and level on aquatic ecosystem integrity, acknowledges that other influences (e.g., the impact of mercury on water quality) bear consideration during the construction and subsequent operation of dams. Moreover, MNR pointed out that the flooding of Crown land is subject to *EAA* requirements, such as MNR's Class EA for Resources Stewardship and Facility Development, and its Application Review and Land Disposition Process policy. According to MNR, both of these consider the effects that flooding may have on water quality, including mercury levels.

In response to the applicants' concern that data on existing mercury levels are not being collected, the ministry highlighted recent and ongoing MNR research on this topic. In one study initiated in 2003 by MNR's Centre for Northern Forest Ecosystem Research, increased water yield from a boreal forest headwater catchment resulted in a net increase in total mercury exported from the watershed, but did not appear to cause significant changes in mercury or methylmercury concentrations in groundwater or surface water. The next phase of this research, which was initiated in 2008, will study the fate of increased mercury exports following natural and forest management disturbance. MNR also pointed out that mercury levels in Ontario sport fish are monitored as part of the largest fish contaminant monitoring program in North America.

The applicants expressed concerns that the impacts of dietary mercury exposure on wildlife were inadequately assessed. In response, MNR stated that, in cooperation with other agencies and organizations, the ministry takes a general approach to wildlife management that involves the monitoring of wildlife populations and the investigation of specific population stressors (e.g., methylmercury) if a wildlife population exhibits significant declines or is otherwise at risk. The ministry stated that, "[w]hile mercury has been documented in a number of wildlife species, particularly species that eat fish, it has not been linked to the population-level decline of any wildlife species in Ontario." MNR pointed out that two species that are particularly susceptible to the effects of mercury bioaccumulation, common loons and bald eagles, have stable or increasing populations. MNR also mentioned ongoing research on the effects of mercury on mink and river otter.

Ministry of Northern Development and Mines:

On May 20, 2008, MNDM denied the application for review. MNDM stated that "[i]n the applicants' description of the regulatory regime to prevent the contamination and mobilization of mercury in the boreal forest, the focus of the request is on fourteen specific issues that are not part of the Ministry of Northern Development and Mines' mandate." Nonetheless, MNDM responded to the request for a review "based on those items which pertain to the mandate of the ministry and through consultation with other ministries."

The applicants argued that the environmental assessment processes for the De Beers Victor Diamond Mine Project overlooked methylmercury and its impacts, a concern also raised in a December 2006 application for review. MNDM pointed out that in its response to the 2006 application, it had noted that the methylmercury research referred to in the application: was too recent to have been considered in the EA process; did not show that the EA process was flawed; and did not represent a conclusion related to the actual impacts of the project. The applicants also raised concerns about the collection of baseline data and monitoring of methylmercury in the environment. Although these matters are not within MNDM's mandate, the ministry outlined how the Ontario Geological Survey contributes baseline and longitudinal data on mercury levels.

MNDM added that assertions in the application "give an inaccurate impression of the scale and number of mineral sector projects that are active in the Treaty 9 and 3 areas that encompass the Hudson Bay Lowlands and parts of the Boreal Forest." MNDM argued that because in most instances mining operations rarely progress beyond prospecting and claim staking, it is premature to conclude that preliminary exploration plans will automatically lead to mine development, the drainage of wetlands or the alteration of lakes.

ECO Comment

MOE's Responsibility:

The ECO is extremely disappointed with MOE's brief, vague and incomplete response to the applicants. The ministry should have named and elaborated on the "new initiatives," "comprehensive programs," "new regulations," and "applied research" it mentioned in its response letter. Moreover, the ministry should have clearly explained how ministry programs and legislation address each of the applicants' concerns. The ECO is disappointed that MOE's response did not address the applicants' concerns that:

- MOE uses an outdated freshwater quality guideline for mercury;
- conditions on PTTWs do not consider mercury contamination or methylmercury bioaccumulation;
- the monitoring of mercury levels of people living in the boreal forest is lacking; and that
- MOE believes that mercury is not an inherently toxic substance.

The ECO shares the applicants' concern that the Provincial Water Quality Objective for mercury is outdated and may be inadequate to protect aquatic species. Ontario's water quality guideline of 200 ng/L is less stringent than the maximum water quality guideline of 100 ng/L used by the Governments of British Columbia, Manitoba and Alberta and is considerably higher than the U.S. Environmental Protection Agency's Great Lakes Initiative water quality criterion for the protection of wildlife (1.3 ng/L). Moreover, as mentioned by the applicants, MOE's guideline is considerably higher than the CCME's water quality

guidelines for inorganic mercury (26 ng/L) and methylmercury (4 ng/L), guidelines that the CCME stated do not consider bioaccumulation effects and thus "may not protect wildlife that consume aquatic life."

When asked by the ECO for the rationale behind its water quality guideline, MOE responded that the guideline is based on the minimum reliable detectable concentration of mercury. The ECO finds this response puzzling given the lower water guidelines used in other jurisdictions, the CCME guidelines and the advice from mercury scientists (including an MOE scientist), that total mercury can be reliably measured to 0.2 ng/L. The above concerns lead the ECO to believe that MOE should have accepted this application for review and should reconsider the validity of its 30-year-old water quality guideline.

The ECO is disappointed that MOE has inadequately responded to concerns that mercury is an inherently toxic substance. In the ECO's 2003/2004 Annual Report, the ECO reviewed an application for investigation related to this issue and questioned MOE's belief that mercury is not inherently toxic. Five years later, another application raised the same concern, and, in its response letter, MOE ignored the issue completely. Given MOE's failure to respond to this concern, the ECO has no choice but to assume that MOE continues to believe that mercury is not inherently toxic. The ECO believes the onus is on MOE to substantiate this position.

While the applicants are correct that PTTW conditions generally relate only to water quantity issues, the ECO notes that section 4(2) of O. Reg. 387/04 (Water taking) under the *Ontario Water Resources Act* states that when considering an application for a PTTW, a Director shall consider the potential impact of the water taking on both water quantity and quality. The ECO believes that this statement requires a Director to consider the potential for a water-taking to increase methylmercury levels. Moreover, MOE's PTTW Manual states that the ministry will "use an ecosystem approach that considers both water takers' reasonable needs for water and the natural functions of the ecosystem." Because the taking of water from peatlands can induce the release of methylmercury, the ECO believes that the consideration of methylmercury release must be explicit in MOE's PTTW decisions. Subsequent to denying this application for review, MOE amended a PTTW for the De Beers Victor Diamond Mine Project (see *EBR* Registry Number 010-3471). The ECO commends MOE for considering the potential release of mercury when making this decision.

The applicants asserted that other than the government's delayed commitment to close down the coal-fired power plants, Ontario has no plan to prevent mercury contamination. While the ECO acknowledges that the government may not have a comprehensive plan for identifying and monitoring the sources and fates of mercury in the environment, we note that Ontario is making progress on and meeting the CWSs for: the incineration of hazardous waste, sewage sludge, municipal waste and medical waste; base metal smelting; mercury-containing lamps; and dental amalgam waste. Moreover, MOE's proposed interim cap on carbon dioxide emissions from coal-fired power plants would also reduce mercury emissions before the closure of the plants. (For more information on this interim cap, please see Section 5 of this Supplement for a review of applications R2006019 and R2006020.)

MNR's Responsibility:

The ECO believes that MNR's decision to deny this review is reasonable. In its thorough response to the applicants, MNR identified legislation, policies and guidelines that require the proponents of forest management and waterpower activities to consider the potential for significant environmental effects, which could include the mobilization and bioaccumulation of methylmercury. Moreover, the ministry identified ongoing research projects on this topic and indicated that it is presently reviewing and updating its policies and guides for forestry and waterpower development based on credible scientific information regarding their environmental impacts. The ECO notes, however, that several of the guides mentioned by MNR in its response (e.g., the Forest Management Guidelines for the Protection of the Physical Environment, and the Timber Management Guidelines for the Protection of Fish Habitat) do not specifically mention mercury or methylmercury. We look forward to reviewing how MNR considers public comments and the potential for mercury mobilization when updating its policies and guides.

MNR's general approach to wildlife population management involves investigating specific stressors (e.g., methylmercury exposure) if a monitored population exhibits a marked decline or is otherwise at risk. The

ECO notes, however, that delayed population effects, effective conservation efforts, and the quick consumption of animals compromised by sublethal mercury poisoning could all result in current population numbers that fail to readily reflect the detrimental effects of methylmercury exposure. The ECO therefore believes that measuring the mercury levels of indicator species may be necessary in order to sufficiently monitor the exposure and impacts of methylmercury in the boreal forest.

MNDM's Responsibility:

The ECO agrees with MNDM's decision to deny this review since the focus of the request is on issues that are not part of the ministry's mandate.

Nonetheless, the ECO believes that the potential for mining development to result in the increased mobilization of methylmercury is a valid concern. Therefore, the ECO encourages MNDM, when undergoing its planned reform of the *Mining Act*, to consider the potential for mining projects to mobilize methylmercury.

Review of Application R2007031:

5.2.15 Contaminant Vapour Intrusion into Homes: Need for a Guideline and Indoor Air Quality Standards

(Review Denied by MOE)

Geographic Location: Cambridge, Region of Waterloo

Background/Summary of Issues

In March 2008, the applicants requested that the Ministry of the Environment (MOE) review the need for a new regulation enforceable under the *Environmental Protection Act* (*EPA*) that would establish a set of standards for residential indoor air quality. The requested review would also consider the need for a comprehensive, standardized remediation methodology to deal with vapour intrusion into residences from contamination of soil or groundwater beneath and around affected residences.

Vapour intrusion is the phenomenon by which chemicals in soil or groundwater migrate upward from the subsurface zone into the air space of buildings, homes and other structures. The term is usually associated with structures built on contaminated properties, or structures which experienced subsurface contamination after being built. Contaminants like volatile organic compounds, e.g., trichloroethylene, are one class of compounds commonly associated with vapour intrusion. Contaminated vapour from the subsurface can enter buildings through cracks in the foundation, or through openings in a foundation for sump pumps, drainage pipes and electrical wires.

The applicants suggested that the ministry develop a guidance document that would provide a mandatory, step-by-step process for remedial efforts when vapour intrusion into residences from subsurface contamination is encountered. The applicants wrote that the primary focus of the proposed standards and guideline, made by regulation under the *EPA*, should be the protection of the health, welfare and rights of Ontarians, particularly the more vulnerable (e.g., children, expectant mothers) from the adverse effects of contaminated vapour.

The application was organized into six major areas: (i) MOE's current approach to dealing with vapour intrusion; (ii) the uses and known health effects of trichloroethylene (TCE) (one of the key contaminants of concern of the applicants); (iii) guidance documents from other jurisdictions dealing with TCE contamination and vapour intrusion generally; (iv) the experiences with vapour intrusion of a neighbourhood in Cambridge, Ontario; (v) the need for a better approach in Ontario; and (vi) the need for compensation for those affected by vapour intrusion. In addition, the applicants included a very

substantial compilation of articles, guidelines, correspondence and other written materials about vapour intrusion and its health effects, originating from within Ontario and Canada, as well as from U.S. states.

MOE's Approach to Dealing with Vapour Intrusion (as of early 2009):

The applicants described MOE's approach to dealing with vapour intrusion issues as lax and proponent-driven and felt that the ministry's reliance on a "company-volunteered" plan of action trivializes the concerns of affected residents. The applicants emphasized that MOE has no standards, regulation or methodology for dealing with indoor residential air quality that has been affected by vapour intrusion from migrating contamination. By contrast, the applicants noted that indoor air quality and exposure to contaminants in industrial, and many commercial and workplace settings is regulated by the province. In Ontario, air quality is regulated in workplaces by the Ministry of Labour, by applying legislation such as the *Occupational Health and Safety Act* and its associated regulations.

Uses and Known Health Effects of Trichloroethylene:

The applicants provided background information on the use and health effects of trichloroethylene (TCE). TCE is a chlorinated hydrocarbon commonly used as an industrial solvent. Most TCE emissions are generated from the cleaning of metal parts (accounting for 80 – 95 per cent of TCE consumption over the years), but TCE has also been found in a variety of consumer products including typewriter correction fluids, paint removers and strippers, adhesives, and stain removers. TCE has been widely chosen for industrial uses due to its non-flammable, non-corrosive and recyclable nature and because of its combination of low price and high performance. TCE is regulated under the *Canadian Environmental Protection Act, 1999,* and according to Health Canada, it has not been manufactured in Canada since 1985. Moreover, its use in Canada has been declining since the 1970s.

TCE is highly volatile, and its concentrations in ambient outdoor air can fluctuate widely over relatively short periods of time, depending on the strength of the source and the variations in wind speed and direction. When it contaminates groundwater, its vapour can percolate up through the soil and intrude into cracks and openings in residential basements. The applicants pointed out that TCE vapours are colourless and odourless at levels that can still negatively impact the health of those exposed to it. The applicants also argued that those exposed to higher levels are often desensitized over time to its odour and therefore exposure to higher doses can occur without their knowledge.

They noted that many symptoms of, or ailments found among residents in the affected neighbourhood in Cambridge are consistent with those associated with exposure to TCE contamination. They cited kidney and liver disease, cancers, neuropathy and restless leg syndrome. They also noted that children and expectant mothers were more vulnerable to TCE inhalation; the former because of their relatively small body mass compared to that of an adult, and the latter because of the effect on the developing fetus from toxin exposure. The applicants felt that Canada in general had lagged in its efforts to tighten TCE controls and standards, in light of studies over the past five years linking it to cancer. They cited the work of the National Research Council of Canada from 2006:

The committee found that the evidence on carcinogenic risk and other health hazards from exposure to trichloroethylene has strengthened since 2001.. Hundreds of waste sites in the United States are contaminated with trichloroethylene, and it is well documented that individuals in many communities are exposed to the chemical, with associated health risks. Thus the committee recommends that federal agencies finalize their risk assessment with currently available data so that risk assessment decisions can be made expeditiously.

In light of conclusions such as this, the applicants felt that MOE was not moving quickly enough to address the health concerns of residents affected by vapour intrusion stemming from industrial contamination.

The applicants also added that they had conducted a neighbourhood health survey on an "information-volunteered" only basis, i.e., no resident was compelled to participate or reveal any information if that resident elected to not participate in the survey. The applicants felt that a full health study should be

conducted in the area. However, the Medical Officer of Health for the Regional Municipality of Waterloo indicated that the sample size (i.e., number of persons potentially affected) and level of risk was insufficient to warrant such a health study.

Guidance Documents from Other Jurisdictions:

The applicants provided a substantial amount of information about TCE contamination and vapour intrusion initiatives in other jurisdictions. A number of U.S. states (e.g., New York, New Jersey, Colorado) and bodies have produced substantial guidance documents dealing with vapour intrusion. These documents provided guidance on topics like: sampling procedures and investigation requirements; evaluation of analytical results; remedial action; and community outreach at vapour intrusion sites. Some guidance documents included case studies such as the methods of evaluating the vapour intrusion pathway in the instance where a large industrial facility has caused a groundwater plume under several hundred receptors.

Bishop Street in Cambridge, Ontario:

The applicants described the predicament of a particular neighbourhood (Bishop Street) in the City of Cambridge in south-central Ontario. Cambridge is a community with an extensive industrial and manufacturing base. In the past decade, the residents on and in the vicinity of Bishop Street learned that the soil and groundwater beneath their neighbourhood were contaminated with TCE. The sources of the contamination were identified as two neighbouring industry facilities. Given the many directions in which the compound migrated off-site, through groundwater and the subsurface environment, many residences and properties were affected, leading to the testing of 457 homes for TCE contamination.

The applicants noted that TCE vapour intrusion into area residences has been occurring without the knowledge of the area residents (some volatile organic compounds can go undetected because the compounds can be odourless and colourless at low levels; levels which could still be harmful to human health). The applicants noted that detection of such substances frequently arises by means such as groundwater monitoring as opposed to direct indoor air quality monitoring. They noted that this was the instance in the Bishop Street neighbourhood.

The applicants explained that many affected residents were not convinced of the effectiveness of the remediation efforts underway by private sector consultants hired by the industrial facilities responsible for the contamination, and that some residents refused to return to their homes. According to the applicants, some residents have virtually abandoned their properties by placing their homes on the real estate market, and incurring the subsequent financial loss (i.e., depreciated value of the residence because of its known contamination).

In summary, the applicants pointed to the Bishop Street community as an example to argue that a legislated standard and guideline is needed in Ontario to effectively evaluate and remediate the effects of vapour intrusion in a residential setting.

Compensation for those Affected by Vapour Intrusion:

The residents also put forward that an appropriate compensation program for those residents affected by vapour intrusion be part of the proposed MOE guidance document. This would entail the establishment, by the polluter or MOE, of a claims fund and a property protection program. The applicants went on to cite examples of such financial mechanisms including: that some Ontario landfill owners have compensated residents near their site affected by the landfill's operations; and, that in New York state, the corporation IBM offered residents affected by one its operations, ventilation systems as well as \$10,000 or eight per cent of property value, whichever of the two was greater.

Other Matters Cited:

The applicants also made reference to: the 2007 Ministry of Labour proposal to tighten the Occupational Exposure Limit for TCE; and the fact that MOE's Ontario Drinking Water Standard for TCE was made much more stringent in 2006 (from 0.05mg/L to 0.005mg/L). The applicants also cited a commitment in MOE's 1994 Statement of Environmental Values (SEV) which states, "In the event that significant environmental harm is caused, action will be taken to ensure that those responsible for the harm

remediate it and to prevent a recurrence." In 2005, MOE proposed a new SEV in which this commitment was revised to, "In the event that significant environmental harm is caused, the ministry will work to ensure that the environment is rehabilitated to the extent feasible." MOE finalized this decision in 2008.

Need for a Better Approach in Ontario:

For all of the reasons cited above, the applicants called upon MOE to create and implement a comprehensive guidance document on vapour intrusion into residential air space and a set of indoor residential air quality standards for use in Ontario.

Ministry Response

In May 2008, MOE responded to the applicants' request by denying the application for review and providing reasons for doing so. The ministry noted that it is aware of the applicants' concerns surrounding vapour intrusion into residences and its impact on air quality. In denying the application, MOE indicated that it was currently in the process of undertaking a similar review that would address many of the concerns raised in the application. Furthermore, MOE informed the applicants that it was in the process of developing a vapour intrusion guidance document that would benefit ministry staff and the public. In its letter of May 2008, the Ministry also committed to considering the applicants' comments during its review and to invite the applicants to participate in stakeholder consultations on both the regulatory changes and the guidance document proposed by the ministry. Other applicant issues such as health impacts on the community and financial compensation were either not adequately dealt with, or addressed at all by the ministry's response to the applicants.

The ECO contacted MOE in February 2009 to request greater detail on the guidance document and to inquire whether MOE had an indoor air quality standard for TCE. MOE responded in early April 2009. MOE's response primarily drew upon two regulatory initiatives: the proposed amendments to O. Reg. 153/04, specifically, updating the "Soil, Ground Water and Sediment Standards for Use under Part XV.1 of the *Environment Protection Act*" ("Soil Standards"); and the revision of Ontario's air standards and modeling procedures under O. Reg. 419/05 (Air Pollution — Local Air Quality) which came into effect in 2005.

Vapour Intrusion Guidance Document:

The ministry informed the ECO that due to the site-specific nature of remediation projects, a guidance document cannot provide detailed remediation strategies. Rather, its guidance document will provide methods for assessing vapour intrusion in order to assist with developing appropriate remediation efforts for a particular site. To this end, the ministry has, under contract with a consultant, developed a draft technical guidance document entitled "Technical Guidance: Soil Vapour Intrusion Assessment" that will provide users with a basic understanding of soil vapour intrusion and the tools required to identify, review and evaluate sites for vapour intrusion. As of early April 2009, MOE did not indicate the probable timeframe for releasing this document. The ministry wrote that it was "beginning the process of consulting on this draft document," but also that "stakeholders will be identified in the near future, for the purpose of issuing invitations." Also, it stated that if new science becomes available over time for a specific substance, the ministry may recommend an updated toxicity reference value (TRV) to guide indoor air vapour intrusion mitigation strategies.

Vapour Intrusion Target Levels:

The ECO inquired about whether MOE had a residential indoor air standard for TCE, as suggested by MOE in a letter to the applicants that predated the application submission. The ministry referred the ECO to its October 2008 proposal to amend its Soil Standards under O. Reg. 153/04. MOE stated that in updating these values, indoor air vapour intrusion target levels were calculated in accordance with the approach outlined in its document "Rationale for Development of Generic Soil and Groundwater Standards for Use at Contaminated Sites in Ontario" (2009), section 2.3.3. The purpose of these target levels is to ensure that these standards are set at a level so that, if indoor air vapour intrusion of contaminants from the subsurface occurs, the desired vapour intrusion target levels will not be exceeded. Indoor air vapour intrusion target levels are derived by taking into consideration acceptable inhalation toxicity reference values. As of April 2009, the ministry was reviewing the comments submitted by

stakeholders to the proposed updated O. Reg. 153/04 standards, and supporting values and assumptions, to provide advice to the Ontario government, which may choose to amend O. Reg. 153/04 based on the feedback provided and staff advice.

Air Standard for Trichloroethylene (TCE):

The ministry reported that its recommended indoor air vapour intrusion target level is 2.3µg/m³. MOE noted that this target level was based on the science supporting the ministry's updated air standard for TCE, which is:

- an annual-average Ambient Air Quality Criterion (AACQ) for trichloroethylene of 2.3 μg/m³
 (micrograms per cubic metre) based on carcinogenic effects. This value is based on the health
 assessment conducted by the World Health Organization and corresponds to an excess lifetime
 cancer risk level of one in a million:
- a 24-hour AAQC for trichloroethylene of 12 μg/m³ (micrograms per cubic metre) based on carcinogenic effects to replace the existing value of 115 μg/m³; and
- a half-hour Point-of-Impingement standard of 36 μg/m3 (micrograms per cubic metre) based on carcinogenic effects.

According to the ministry criteria, values are based on human health or environmental effects. MOE also stated that its air standards are normally set at a level not expected to cause adverse effects based on continuous exposure. As such, factors like technical feasibility and costs are not explicitly considered when establishing AAQCs. Implementation issues, associated with new standards, are addressed in O. Reg. 419/05 and related guidelines.

ECO Comment

MOE's decision to turn down the request for review was reasonable, since the ministry reported having a vapour intrusion guidance document under development. The ministry also committed to consulting the applicants and the public before finalizing this document. But MOE's response to the applicants was sparse in detail and should have provided considerably more information, especially on issues like financial compensation approaches and community health impacts, which the applicants raised specifically. Many of the issues in the application were ignored entirely by MOE in its letter of response to the applicants.

Timelines:

The ECO has received applications about vapour intrusion problems in the past. Ontarians in the unfortunate situation of having vapour intrusion problems in their homes often experience the situation as a distressing crisis, and are looking to regulatory agencies for clarity and resolution. Almost a year after turning down the request from the applicants, MOE is still not able to estimate a timeline for the release of this draft guidance document. The ministry should have an internal schedule for this project, and should have been able to share the rough outline with the public.

Need for Residential Air Quality Standards:

Concerning the need for indoor residential air quality standards, MOE informed the ECO about its proposed amendments to its Soils Standards under O. Reg. 153/04 (still under consideration as of May 2008). MOE stated that indoor air vapour intrusion target levels were taken into account in its proposed updating of these standards and were calculated in accordance with the approach outlined in its document "Rationale for Development of Generic Soil and Groundwater Standards for Use at Contaminated Sites in Ontario." The purpose of indoor air vapour intrusion target levels is to ensure the proposed Soil Standards are set at a level so that, if indoor air vapour intrusion of contaminants from the subsurface occurs, the desired vapour intrusion target levels will not be exceeded. Indoor air vapour intrusion target levels are derived by taking into consideration acceptable inhalation toxicity reference values. The ministry's recommended indoor air vapour intrusion target level for TCE has been set at 2.3µg/m³. The ministry added that this target level was based on the science supporting the ministry's updated air standard for TCE under O. Reg. 419/05 (Air Pollution – Local Air Quality). MOE did not mention this proposed approach to dealing with contaminant intrusion into indoor residential air space in

its letter to the applicants. The ECO believes that the ministry should have attempted to provide some of this detail to the applicants in its response.

The Bishop Street Community and Compensation:

One issue raised by the applicants was that financial compensation ought to be incorporated into MOE's proposed vapour intrusion guidance document. The ECO believes that if a responsible party can be identified, that party should bear the cost of clean-up of that contaminated site. In this instance, parties have been identified and are undertaking remedial efforts. Also, the ECO understands that where health or property value issues arise, the most common route for the affected parties to seek remedy is through a lawsuit against the alleged or known polluters. This course of action has been initiated by many of the residents of the Bishop Street community.

MOE's Evolving Approach to Contamination:

The ECO has noted a change in the ministry's direction over the past decade concerning remediation of environmental harm. This is implied by MOE's amendment to its SEVs. MOE's 1994 SEV was more affirmative about taking action in regard to those responsible for the harm. The ministry's 2008 SEV appears to back away somewhat from this approach, stating that the ministry will work to ensure that the environment is rehabilitated to the extent feasible.

The Need for a Better Approach in Ontario:

A key concern of the applicants was that MOE lacks "standards, regulation or methodology" for dealing with indoor residential air quality. Ontarians who are affected by vapour intrusion in their homes are looking above all for clear rules and outcomes, and standards that have clear meanings and consequences. However, MOE's mandate regarding residential indoor air quality remains somewhat unclear and uncertain.

MOE advised the ECO that it derives indoor vapour intrusion target levels: by considering "acceptable inhalation toxicity reference values." It is the ECO's understanding that MOE will use the approach of mitigating vapour intrusion into residences by way of revising its Soil Standards under O.Reg. 153/04; that is, MOE is proposing to amend the standards to account for the phenomenon by which contaminants can migrate into living spaces through soil vapour. This approach appears to be consistent with one of MOE's principal mandates under the *EPA* which is to regulate the discharge of contaminants into the natural environment. But it remains unclear to the ECO what regulatory weight, if any, indoor vapour intrusion target levels would have in an actual remediation situation.

The ECO is encouraged to know that MOE is in the process of developing a vapour intrusion guidance document for use in Ontario by ministry staff, clean-up consultants and the public. Further, the ECO welcomes MOE's commitment to consult stakeholders and the public on this process and document.

This issue was one of the key elements of the application. The ECO urges MOE to meet its commitment, as this is a key reason for denying this application. The ECO will continue to monitor MOE's progress on developing its guidance document and any proposed changes to the ministry's Soil Standards or toxicity reference levels.

Review of Application R2007032:

5.2.16 Review of Certificate of Approval for Pesticide Manufacturer (Review Denied by MOE)

Background/Summary of Issues

On March 6, 2008, the ECO received an application for review that alleged that the certificate of approval (C of A) for Biedermann Packaging, an agricultural pesticides mixing/formulating and packaging facility in Dundas, Ontario, was granted on the incorrect premise that the facility is a manufacturer of "garden"

chemicals." The applicants alleged that the facility produces highly toxic chemicals that would not be used in garden applications. The C of A, issued under section 53 of the *Ontario Water Resources Act (OWRA)* by the Ministry of the Environment (MOE), approves the establishment of an industrial sewer system and permits the discharge of stormwater from the site.

The application was made subsequent to a major fire at the facility in July 2007, when the water used to extinguish the fire (douse water) became contaminated with toxic chemicals found on-site. Consequently, thousands of fish were killed when the contaminated water flowed into nearby Spencer Creek and Cootes Paradise Marsh.

The applicants raised the concern that the existing C of A may not be adequate to protect the environment from the types of chemicals produced at the facility. The applicants were not able to find a definition for "garden chemicals" in the C of A or in the *OWRA*. The applicants were particularly concerned that the plant formulates its products using chemicals, such as diazinon (an organophosphate insecticide), that have been discontinued for domestic use in Canada by the Pest Management Regulatory Agency (PMRA).

The applicants questioned whether the C of A would have had tighter controls if the facility were described as formulating agricultural chemicals rather than garden chemicals, particularly in the context of the potential release of chemicals into the sewer system. The applicants questioned how MOE defines "garden chemical manufacturing," and whether the definition of "garden chemicals" includes those that are for use by the agricultural industry. The applicants were also concerned that the C of A may be outdated as it is over nine years old.

Ministry Response

On June 20, 2008, MOE denied this application for review because the manufacturing facility requested that MOE revoke the C of A. The company indicated in a letter to MOE that access to the storm sewer had been removed and the holding tanks that discharged into the storm sewer are no longer on site. According to MOE, even if it had not received this request from the facility, it nevertheless was not planning to undertake a full review but would have amended the C of A "to correct the inaccurate description of the facility to better reflect its operations." MOE stated that it will work with the facility to ensure that all requirements are met to revoke the C of A, and that the applicants will be advised when the C of A has been revoked.

MOE explained that the description of the facility as a "manufacturer of garden chemicals" as opposed to a "manufacturer of agricultural chemicals" would not have changed the technical requirements of the C of A. MOE further explained that the application for the C of A "...was assessed based on the operations of the site and included an assessment of the hazards associated with the products on site."

MOE stated that it recognizes that the July 2007 fire was a "significant environmental event." MOE does not however, consider the douse water to be a normal stormwater management event. This type of event was therefore "not evaluated as part of the C of A review process." At the request of the City of Hamilton, MOE has worked with the plant to install a sprinkler system and to increase the containment capacity from 200,000 litres to 430,000 litres.

Other Information

For residents of Hamilton, the fire at the Biedermann Packaging facility was not the first incident in which douse water runoff from industrial fire fighting activities has raised environmental and health concerns. In July 1997, a major fire broke out at a Hamilton plastics recycling facility operated by Plastimet Inc. The fire resulted in a heavy black cloud of smoke that affected a broad area of downtown Hamilton over several days. In that case, approximately 100 million litres of water were used to fight the fire, the majority of which ran off into storm sewers and, ultimately, into Hamilton Harbour.

ECO Comment

The ECO agrees with the ministry's decision, particularly in light of the manufacturing company's request to revoke the C of A. However, the ECO is concerned that MOE did not answer the applicants' questions about the definition of "garden chemicals." It would appear from the lack of response that there is no definition. Cs of A must contemplate the potential consequences of approved activities and must include clear language so that they may be properly interpreted and enforced.

The ECO is very concerned that the contaminated douse water from the fire was released into Spencer Creek, resulting in severe environmental damage. The ECO notes that several other applications for review have been received from local residents that are a direct response to the fire that occurred at this manufacturing facility. One is a request to review Regulation 914, R.R.O. 1990, made under the Pesticides Act, which allows an exemption from the Act for "...storage, sale or transfer of a pesticide, if the pesticide is to be formulated into another pesticide, manufactured or incorporated into a product, or transported out of Ontario." Another application for review requests that MOE include all pesticide manufacturers in the requirements under Regulation 914 to notify the local fire department that there are pesticides on site, the type of pesticide, where they are located and how they are stored. Two other applicants filed an application requesting that MOE conduct a review of the industrial sewage system Certificate of Approval issued to Biedermann Packaging under section 53 of the Ontario Water Resources Act. Another application requests a review of the need for a Community Right to Know Act (Disclosure of Toxins and Pollutants). These applications for review are all discussed in detail in Section 5 of this Supplement. An additional application received in early 2009 requests a review of Certificate of Approval (Air) for the Biedermann Packaging facility. As of April 2009, the ministry has not issued a decision related to that application. The ECO will review that application in a future Annual Report Supplement.

Review of Application R2007033:

5.2.17 Review of the Need to Lower Noise Criteria for Wind Farms in Rural Areas (Review Denied by MOE)

Background/Summary of Issues

On March 25, 2008, the ECO received an application requesting that the government review the sound level limits in its noise pollution control guideline "Sound Level Limits for Stationary Sources in Class 3 Areas (Rural)," NPC-232. The NPC-232 guideline outlines the maximum acceptable levels of sound emitted from stationary sources, such as wind turbines and transformers, as measured at nearby residences, camping areas and other points of reception in rural areas. The applicants requested that the government add a new class, "Class 4 (extremely quiet rural area)," to the NPC-232 guideline. According to the applicants, Class 3 sound level limits are too permissive for "extremely quiet rural areas," such as those found near the Melancthon wind farm.

Since individual humans vary in their ability to detect sound, devices that measure sound in a manner that reflects the average person's perception of loudness are used. These devices report sound levels as decibels A-weighted (dBA). A typical conversation is 60 dBA and average street traffic is 85 dBA. Each increase of seven dBA represents a doubling of loudness. In the NPC-232 guideline, the maximum acceptable levels of sound produced by stationary sources are 40 dBA (evening and night-time) and 45 dBA (daytime) when measured at points of reception. As outlined in the Ministry of the Environment's (MOE) "Noise Guidelines for Wind Farms", the maximum acceptable levels of sound produced by wind turbines increase as wind speeds increase, from 40 dBA to a maximum of 51 dBA at points of reception in Class 3 areas.

Actual sound level measurements may be adjusted to take into consideration the nature of the sound. Many stationary sources including wind turbine transformers produce tonal sounds – sounds within a

narrow frequency range, such as a whine or hum – that are annoying to people. In MOE's NPC-104 guideline, "Sound Level Adjustments," a tonal penalty of 5 dBA must be added to sound measurements from such sources. For additional information on sound and wind farms, refer to the Supplement to the ECO's 2006/2007 Annual Report, pages 166-168.

Noting that people live in the country "for the peace, quiet and tranquility," the applicants advised that Class 4 sound level limits should be no more than three dBA over ambient background levels. According to the applicants, the sound level limits established in the NPC-232 guideline are approximately four times louder than the ambient sound levels of 20 dBA at night and 25 dBA during the day at the home of one of the applicants. Allowing a 20 dBA increase in sound levels is "beyond comprehension" and is an adverse effect, according to the applicants. They explained that there is also a social need to review the NPC-232 guideline because of the adverse health effects of noise, including lack of sleep, anxiety and headaches, and potential financial cost if anyone vandalized wind farm equipment or assaulted officials. Lastly, the applicants requested that the tonal penalty of five dBA be increased to 20 dBA for wind transformer hum to reflect the fact that tonal sounds can still be heard over much louder sounds.

Ministry Response

MOE denied the review on the basis that the NPC-232 guideline had been peer-reviewed in 2006. Under section 68(1) of the *EBR*, ministries are not required to undertake reviews of decisions made within the last five years unless significant new information is provided. According to MOE, the 2006 review, which has not been published, did not recommend any changes to the subject sound level limits and adjustments. MOE also explained that the Certificate of Approval (C of A) (Noise) for the Melancthon wind farm has been amended to allow the proponent to replace the existing transformer with a quieter model and to require mitigation measures to address noise concerns arising from Phase 1 of the project. The amended C of A also approves the installation of a second quieter transformer and additional acoustical barriers in Phase 2 of the project. MOE indicated that the proponent is now required to conduct acoustical audits on a seasonal basis and that the first audit had confirmed that the wind farm was now operating in compliance with its C of A. MOE explained that under section 14(1) of the *Environmental Protection Act* (EPA), noise emissions that cause an adverse effect are prohibited.

MOE also indicated that it is reviewing its noise policy to ensure that it "continues to reflect current science" and encouraged the applicants to comment on proposed changes to "Interpretation for Applying Ministry of the Environment Noise Pollution Control (MOE NPC) Technical Publications to Wind Turbine Generators" (*EBR* Registry Number 010-3595).

Other Information

On October 17, 2008, MOE approved "Noise Guidelines for Wind Farms", which is an updated version of its 2004 policy, "Interpretation for Applying Ministry of the Environment Noise Pollution Control (MOE NPC) Technical Publications to Wind Turbine Generators." In the updated version, MOE clarified that:

- a. The Noise Assessment Report prepared by proponents of wind farms must include noise emissions from the proponent's proposed transformer substations and wind turbines, and from existing and other proposed wind farms located within a five kilometre radius.
- b. A detailed noise assessment must be prepared for each point of reception within 1,500 metres of a wind turbine, an increase of 500 metres. Vacant lots within 1,500 metres also must be included as points of reception with appropriate assumptions being made about how the property will be used in the future and where buildings would most likely be located.

In the proposal notice (*EBR* Registry Number 010-3595), MOE advised that the clarifications were required to improve consistency of noise assessments presented to the public for comment and MOE for approval.

Two years ago, the ECO reviewed two other noise-related applications. In one application, R2006023, the applicants who also authored the current review (R2007033) requested a review of the need to make

the NPC-232 guideline a regulation under the *EPA*. The applicants believed that MOE would be more likely to enforce sound level limits if they were regulated. The applicants also requested that MOE lower sound level limits for wind transformers because they can still be heard inside a dwelling at approved levels. MOE denied the application because the NPC-232 guideline had been peer-reviewed in 2006 and because the sound level limits are already legally enforceable – compliance with the NPC-232 guideline is a condition in Cs of A for transformers. Refer to the Supplement to the ECO's 2006/2007 Annual Report, pages 166-168, for additional information.

In the other application, I2006008, two applicants alleged that Canadian Hydro Developers Inc. (CHD) was contravening the NPC-232 guideline at its Melancthon wind farm (Phase 1). The applicants provided evidence that noise levels from the transformer exceeded sound level limits in the NPC-232 guideline, which was subsequently found to be true. The applicants also alleged that the transformer was being operated without a C of A, which was also true. According to an Ontario Municipal Board decision on the subject wind farm, MOE had initially decided that a C of A was not required and then reversed its position. MOE denied this application because an investigation and mitigation measures were already underway. Refer to the Supplement to the ECO's 2006/2007 Annual Report, pages 241-243, for additional detail.

In a study prepared for MOE in 2007 by Aiolos Engineering Corporation (*EBR* Registry Number 010-2525), the night-time sound level limits of fifteen jurisdictions in North America, Europe and the Pacific Region were compared to Ontario's limits. Three jurisdictions were found to be more restrictive regardless of wind speed, eight were the same at low wind speeds, three were comparable when higher wind speeds were considered and four were less restrictive regardless of wind speed. The World Health Organization (WHO) has also established sound level limits. It described the following sound level limits as being of "moderate annoyance": 50 dBA for outdoor living areas and 35 dBA for indoors. In addition, to avoid sleep disturbance, WHO suggested that indoor sound levels at night be less than 30 dBA, or 45 dBA if a window is open.

ECO Comment

Noise emissions from wind farms continue to garner considerable public attention and to divide communities. As wind farms proliferate and grow in size, some members of the public are concerned that current maximum acceptable sound limits are inadequate. The updated guideline, "Noise Guidelines for Wind Farms," which requires proponents to include sound emissions from nearby existing and proposed wind farms in their noise assessments, should alleviate some of these concerns. However, the 2007 review by Aiolos Engineering Corporation of recent scientific literature concluded that current sound level limits and adjustments may not adequately reflect the full range of meteorological and other conditions that affect noise emissions and perception. Unfortunately, the 2006 peer review of sound level criteria did not include consultation with the public and the 2008 proposal for "Noise Guidelines for Wind Farms" did not include consideration of maximum acceptable sound levels limits nor tonal penalties. Despite MOE's refusal to undertake this review and to formally request public comment on sound level criteria, the ministry has recognized that further review of its noise policies and emerging research findings are required and has committed to asking the public to comment on future changes.

As previously stated in our 2006/2007 Annual Report, the ECO echoes concerns expressed by municipalities and non-government environmental groups relating to the need for wind power projects to be evaluated according to land use planning principles. Some public concerns and conflicts related to the siting of wind turbines could be addressed if the Ministries of Municipal Affairs and Housing, and Natural Resources were to plan appropriate exclusion zones for wind power development.

Review of Applications R2008002 and R2008003:

5.2.18 Review of Section 129(5) and Section 124 of Regulation 914 under the *Pesticides Act* (Review Undertaken by MOE)

Background/Summary of Issues

In June 2008, the applicants filed two applications for review with the Ministry of the Environment (MOE) requesting that section 124 and section 129(5) of Regulation 914, R.R.O. 1990 under the *Pesticides Act* be reviewed.

The applications were triggered by the July 2007 fire at Biedermann Packaging, a pesticides manufacturing facility based in Dundas, Ontario. The fire resulted in thousands of litres of contaminated water, used to extinguish the fire, spilling into Spencer Creek and Cootes Paradise. The contaminated water contained pesticides such as diazinon, a chemical harmful to fish, birds and other wildlife. The spill subsequently resulted in the significant kill-off of aquatic life in Spencer Creek.

Section 124 of Regulation 914 requires every vendor or operator who stores a listed pesticide to annually provide the local fire department with a written notice of the pesticide being stored, the location and condition of storage, and the person responsible for the storage. Since Biedermann Packaging was strictly a manufacturing facility and therefore not classified as a vendor or operator under the regulation, section 124 did not apply to it, and the pesticide manufacturing company did not have to provide notice of its pesticide storage to the fire department.

The applicants submit that if the fire department had known what pesticides were in the building, greater effort could have been made to contain the douse water and prevent it from flowing into Spencer Creek, which runs adjacent to the company's property. The applicants further noted that the lack of notice of the hazardous chemicals in the building placed MOE staff, emergency personnel, and the public under unnecessary health risks.

Accordingly, in their first application, the applicants sought a review and amendment of section 124 of Regulation 914 under the *Pesticides Act* in order to include all companies that manufacture and store pesticides, in addition to vendors and operators, as entities required to provide local fire departments with written notification of pesticides on their premises.

In their second application, the applicants proposed the removal of section 129(5) of Regulation 914 under the *Pesticides Act*. Section 129(5) exempts a person from the *Pesticide Act* and the regulation if the pesticide they possess is being used to formulate another pesticide, or to manufacture or incorporate it into a product, or to transport it out of Ontario.

The applicants are concerned that this exemption allows pesticide manufacturers to avoid the necessary safeguards that vendors and operators are subject to under the Act and regulation.

The applicants explained that the federal and provincial governments both claimed that the Biedermann Packaging facility does not fall under their respective jurisdictions because neither the federal nor provincial pesticide laws regulate pesticides manufacturers. The applicants want to see exemption section 129(5) repealed and manufacturing operations covered by the Act and regulation.

Other Information

The applicants also filed another application for review with MOE that requested MOE to review the need for a *Community Right to Know Act*, which would alert residents to potential environmental and health hazards from businesses located in their area. For more information on application R2008004, please refer to Section 5 of this Supplement.

Two other applications for review were filed by different applicants that requested MOE conduct a review of two Certificates of Approval issued to Biedermann Packaging. For more information on the applications R2007032 and R2008015, please refer to Section 5 of this Supplement.

Ministry Response

In August 2008, MOE concluded that it would review sections 124 and 129(5) of Regulation 914 under the *Pesticides Act.* MOE stated that as part of the review, it intended to "examine relevant sections of Regulation 914 pertaining to pesticide manufacturing operations" to determine "if changes are needed to prevent or minimize any environmental impacts related to these operations near sensitive areas."

MOE stated that due to the complexity of the review, it expected that its review of the need to amend Regulation 914 would not be completed until December 31, 2009. However, in November 2008, MOE advised the applicants that it concluded its review and determined that "fire department notification and storage requirements for pesticide manufacturers should be harmonized with those that exist for operators and vendors." MOE believed that these changes were important in order to ensure that local fire departments know where pesticides are stored, and that pesticides are stored in a manner that protects public health and the environment.

The new requirements for storage and fire department notification for manufacturers are included in a new regulation under the *Pesticides Act*, which implements the ban on cosmetic pesticides set out in the *Cosmetic Pesticides Ban Act*, 2008. The regulatory decision notice (*EBR* Registry Number 010-5080) was posted on the Environmental Registry on March 4, 2009. For more information on this legislation and the new regulation please refer to Section 4 of this Supplement.

Fire Department Notification (Application 1)

In regards to the fire notification concerns raised in the first application, section 112 of the new regulation outlines the persons who are required to provide written notice annually to the local fire department on the location of stored pesticides.

The following persons are now covered under the new regulation:

- A person who stores Class 1 pesticides (pesticide manufacturing concentrates used to formulate products);
- A person required to hold a vendor's licence who stores a Class 2, 3, 4, 5, 6, 7, 8 pesticide;
- A person required to hold an operator's license who stores a Class 2, 3,4,5,6,7,8 pesticide; and
- A manufacturer who stores a Class 2, 3, 4, 5, 6, 7, 8 pesticide.

Section 112 of the new regulation requires the written notice provided to the local fire department to identify the pesticide, describe its location and conditions of storage and identify the person responsible for the pesticide.

Miscellaneous Exemptions (Application 2):

The second application raised concerns with section 129(5) of the Regulation that exempted manufacturers from the provisions of the *Pesticide Act* and its regulation. MOE addressed this concern with the new regulation, which requires manufacturers to meet the regulation's storage requirements and fire notification provisions. The new regulation also outlines a new class of pesticides - Class 1 pesticides for manufacturing concentrates used to formulate pesticide products.

Sections 107 to 111 of the new regulation set out the following requirements for the storage of pesticides:

- Pesticides must not be stored in a manner where they will likely come into contact with human food and drink or impair the health or safety of any person;
- No person can store a pesticide without the appropriate licence unless exempted by the regulation;

- Pesticides must not be stored in an unsupervised vehicle unless the vehicle is inaccessible or the pesticide is locked in a vehicle compartment, and the vehicle contains a warning sign;
- Pesticides must be stored in an area that is in good repair with sufficient precautions to prevent contamination of the natural environment or coming into contact with other pesticides;
- Storage areas must display warnings signs, display a list of emergency telephone numbers and possess adequate respiratory protection and protective clothing; and
- If manufacturing concentrates and non-domestic products are stored indoors, they must be stored in a room ventilated to the outdoors. Floor drains in the room must not connect to a sewer or watercourse. Proper security and safety provisions should be in place.

ECO Comment

The ECO is pleased that MOE decided to undertake these reviews. The mishandling of pesticides has potentially serious environmental consequences to both terrestrial and aquatic ecosystems and the wildlife and humans that rely upon them. This was clearly the case in the Biedermann fire. It is important that MOE ensures that pesticides are prevented from entering the ecosystem through spills or accidents.

These applications demonstrate how Ontarians can use the *Environmental Bill of Rights* process to affect a positive change for the environment. The applicants clearly identified a loophole in the current regime that left the environment vulnerable to pesticide contamination, and jeopardized the health and safety of those who may come in contact with pesticides. As a result, this triggered MOE to examine and address gaps in the regulation. The ECO commends MOE for looking into the concerns raised by the applicants and including provisions in the new regulation to close these unnecessary loopholes.

The ECO was initially concerned with the lengthy timeline MOE stated it required to complete the review. MOE asserted that 16 months were necessary due to the complexity of the review. However, it did not explain why the review was complex, what would be included in the review, or how it would undertake the review. The ECO commends MOE for completing the review ahead of schedule and promptly posting the new regulation on the Environmental Registry as part of its regulatory work on implementing the Cosmetics Pesticides Ban Act, 2008.

Review of Application R2008004:

5.2.19 Request for Review of the Need for a *Community Right to Know Act* (Review Denied by MOE)

Background/Summary of Issues

On June 13, 2008, two applicants submitted an application to the ECO requesting a review of the need for a *Community Right to Know Act*. The applicants expressed support for Private Members' Bill 164, Community Right to Know Act (Disclosure of Toxins and Pollutants), 2007 (Bill 164), which was tabled before the Ontario legislature in November 2006.

The principle of "Community Right to Know" is that individuals are entitled to information about the chemicals that they are exposed to in the environment and in their daily lives (i.e., in the community, the workplace, and in consumer goods). This principle has been gaining strength as part of environmental policy in many jurisdictions. The U.S. Environmental Protection Agency's Toxics Release Inventory Program created under the U.S. Emergency Planning and Community Right-To-Know Act, Canada's National Pollutant Resources Inventory created under the Canadian Environmental Protection Act, and the City of Toronto's new Environmental Reporting and Disclosure By-law are all designed to facilitate public access to information about toxic substances in the environment.

Bill 164, if passed, would have amended the *Consumer Protection Act, 2002*, the *Environmental Protection Act* and the *Occupational Health and Safety Act*. The amendments would have: required that consumers be warned of potential exposure to toxic chemicals in goods or services; required a pollutant inventory to be established that would disclose the release of pollutants into the environment and the environmental and health effects of such pollutants; and required employers to provide information about hazardous materials stored in the workplace to the local fire department.

Bill 164 was ordered for third reading in May 2007, but subsequently died in the house. However, in May 2008 the bill was re-introduced as Private Member's Bill 76 in the subsequent legislative session. As of May 2009, the bill had not received second reading.

The applicants believe that Community Right to Know legislation is required in Ontario in order to provide disclosure of toxic chemicals to the public and to regulate the disclosure of toxic chemicals by manufacturers to local fire departments. The applicants also noted that Bill 164 would support the government's vision of a greener, healthier Ontario. The applicants cited, in support of this claim, the Ministry of the Environment (MOE)'s Environmental Registry policy proposal notice for the ban on cosmetic use of pesticides (*EBR* Registry Number 010-2248), which stated that "the government is undertaking a number of initiatives that will be included under a toxic reduction strategy to help protect Ontarians from potentially harmful environmental toxics."

The applicants' concerns arose from the fire that occurred at the Biedermann Packaging facility in Dundas, Ontario in July 2007. When fire broke out at the pesticide mixing and packaging facility, firefighters were not immediately made aware that the fire scene involved pesticides. Information about the chemicals stored at the facility was not accessible, as the information was located in the building. Millions of litres of douse water used to fight the fire entered storm drains that lead to Spencer Creek, where MOE reported a significant number of dead fish following the fire. The details of the Biedermann Packaging fire are discussed in several other *EBR* applications received in 2008/2009 (see Other Information, below).

In this application, the applicants stated that following the fire, it became apparent that local residents were not aware of the amount and toxicity of the chemicals located at the Biedermann Packaging facility. Local residents were concerned about local air quality on the night of the fire, and about their children and pets playing in Spencer Creek in the days following the fire. The applicants were also concerned that Biedermann Packaging (as a strictly manufacturing facility), was exempt from the *Pesticides Act* requirements to inform the local fire department about pesticides located at the facility.

The applicants argued that the events surrounding the fire at Biedermann Packaging illustrate the need for the province to enact legislation requiring all companies in Ontario to disclose any pesticides and chemicals stored at their facilities, and for the creation of a publicly-accessible database of such information. In support of their request for a review, the applicants provided the full text of Bill 164, as well as other documents regarding the fire and the effects of the spill on the environment.

Ministry Response

On August 19, 2008, MOE informed the applicants that it would not be conducting the requested review.

In explaining its rationale for denying the application, MOE referred to the government's commitment, made in a November 2007 Speech from the Throne, to introduce "tough new toxic reduction legislation that would reduce pollution and inform and protect Ontarians from toxic chemicals in the air, water, land and consumer products." MOE stated that the government is developing a toxics reduction strategy that would "consider approaches for public disclosure of information about toxics."

MOE advised that the toxics reduction legislation would make Toxics Reduction Plans, materials accounting information and reports prepared by facilities accessible to the public. However, MOE noted that the legislation would contemplate provisions "to balance a company's confidential business information with the public's need to be informed of toxics in their communities."

MOE stated that it established a scientific expert panel in 2008 to provide advice about which toxic substances should be the focus of MOE's immediate attention. MOE also noted that it is working with Cancer Care Ontario and the Ontario Medical Association to "identify, target and reduce the number of cancer-causing agents released into the environment."

MOE reported that it would be consulting stakeholders on the proposed toxics reduction strategy in the coming months, and expressed hope that the applicants would participate in those consultations.

In light of MOE's ongoing policy work on toxics reduction, MOE determined that "a formal parallel review process is not warranted."

In its response, MOE did not address the specific contents of Private Member's Bill 164 (now 76). In particular, MOE did not discuss some key aspects of public notice that were proposed in the bill, such as amendments to the *Consumer Protection Act, 2002* that would inform consumers of toxic substances in goods or services, or amendments to the *Occupational Health and Safety Act* that would require maintenance of an inventory of all hazardous materials in the workplace. It may be because neither the ministries responsible for these Acts (Small Business and Consumer Services and Labour, respectively) or the Acts themselves are prescribed for applications for review under the *EBR*, although MOE did not provide this explanation. Further, some of the issues addressed through Bill 76 may be the subject of federal jurisdiction under laws such as the *Consumer Packaging and Labelling Act* and the *Hazardous Products Act*.

MOE also did not specifically address the provisions in the bill that would establish a pollutant inventory under the *Environmental Protection Act*.

Shortly after MOE issued its decision on this application, MOE posted a policy proposal notice on the Environmental Registry (*EBR* Registry Number 010-4374) for "Creating Ontario's Toxics Reduction Strategy – A Discussion Paper." The notice, which provided a 45-day public comment period, stated that the proposed strategy is designed, in part, to "inform Ontarians about toxics, including carcinogens, in the environment and consumer products."

On April 7, 2009, Bill 167, the *Toxics Reduction Act, 2009*, received first reading in the Ontario legislature. Notice of the bill was posted on the Environmental Registry (*EBR* Registry Number 010-6224). The bill was described as "a first step in moving forward on the Toxics Reduction Strategy." One of the stated purposes of Bill 167 is "to inform Ontarians about toxic substances." To that end, the bill includes requirements for applicable facilities to make their toxic substance reduction plans and associated reports available to the public. The Bill also requires the Minister of the Environment to consult with experts and the public at least once every five years about possible changes to the list of prescribed "toxic substances" and "substances of concern," and to publish lists of substances that are not prescribed that the minister proposes to consider during the next consultation. The ECO may review the Toxics Reduction Strategy and Bill 167 in a future Annual Report.

Further, in March 2009, MOE filed a new general regulation under the *Pesticides Act*, O. Reg. 63/09, to replace Regulation 914. The new regulation, which was posted on the Environmental Registry (*EBR* Registry Number 010-5080), implements the ban on cosmetic pesticides set out in the *Cosmetic Pesticides Ban Act*, 2008. The regulation also extends the existing requirements for pesticide storage and fire department notification for operators and vendors to apply to pesticide manufacturers. For more information about the *Cosmetic Pesticides Ban Act*, 2008 and the new general regulation, refer to Part 4 of this year's Annual Report.

Other Information

Other EBR Applications Arising from the Biedermann Packaging Fire:

The ECO received numerous *EBR* applications during the 2008/2009 reporting year expressing concerns arising from the July 2007 fire at the Biedermann Packaging facility in Dundas, Ontario.

These applicants filed another application for review requesting MOE review the storage and notification provisions of Regulation 914, R.R.O. 1990 made under the *Pesticides Act* (replaced by O. Reg. 63/09 as of April 22, 2009). For more information on this application (R2008002, R2008003), refer to Section 5 of this Supplement.

Two other applicants filed an application requesting that MOE conduct a review of the industrial sewage system Certificate of Approval issued to Biedermann Packaging under section 53 of the *Ontario Water Resources Act.* For more information on this application (R2007032) refer to Section 5 of this Supplement.

In early 2009, two applicants filed an application for review of the Certificate of Approval (Air) issued to Wilson Laboratories Inc., now operating under the name of Biedermann Packaging. In April 2009, the ministry agreed to undertake this review. The ECO will review that application in a future Annual Report Supplement.

City of Toronto's Community-Right-to-Know Bylaw:

In December 2008, the City of Toronto adopted an Environmental Reporting, Disclosure and Innovation Program, which included a new Environmental Reporting and Disclosure By-law (By-Law No. 1293-2008) known as Toronto's "Community Right to Know By-law." The by-law will require businesses and City operations to disclose their use and release of 25 substances of priority health concern. A public database will be established that will allow the public to access data and information by facility, chemical or neighbourhood. The by-law, which will come into effect on January 1, 2010, is the first of its kind in Canada.

ECO Comment

Although MOE should have more clearly explained the statutory basis for denying this application, MOE's decision not to undertake the requested review was reasonable. The province signalled its intention to develop legislation that would, in part, inform Ontarians about the toxic chemicals that are being used and released into the environment (and has since introduced such legislation as Bill 167). Together with the notification requirements of the new general regulation under the *Pesticides Act*, the proposed legislation should address the underlying concerns raised in the applicants' request for review. A separate review of the need for a *Community Right to Know Act* would likely have duplicated ministry efforts and resources already devoted to carrying out the government's November 2007 commitment.

MOE's decision letter would have been more helpful if it had explained to the applicants that some of the issues addressed by Private Member's Bill 76 are not within MOE's jurisdiction and are not subject to *EBR* review. MOE may want to consider the merits of working with other ministries to address some of these issues as it continues to develop components of its Toxics Reduction Strategy.

The ECO is pleased that MOE advised the applicants that there would be an opportunity to comment on the proposed Toxics Reduction Strategy discussion paper, which was to be released soon after. The ECO expects the ministry to provide further opportunities for the applicants to participate and to voice their concerns as various components of the proposed Toxics Reduction Strategy are developed, as it has regarding Bill 167.

The ECO supports the principle of Community Right to Know; it is consistent with the *EBR*'s purposes, including protecting the right to a healthful environment and holding the provincial government to account for its environmental decisions. The public's ability to participate in government environmental decision-making is frustrated if Ontarians do not have access to information about toxic substances used and released into the environment around them.

However, the ECO sees a need for discussion and debate about how the Community Right to Know principle can best be implemented under Ontario's and the federal government's environmental laws and policies. It is essential that the information disclosed be sufficient in quality and form to enable the public to understand, critically assess, and ultimately make use of the information. The public's central concern

is with the potential hazards that toxic substances present to health and the environment; it is therefore essential that information disclosed about a substance's toxicity be tempered with information about that substance's exposure pathways. Providing information about the hazard – which is determined based on toxicity and exposure together – should avoid irrational and unfounded public response to information about toxicity alone.

Further, careful consideration must be exercised in establishing any limits on disclosure set to protect confidential business information. While some protections for confidential business information (such as trade secrets) may be considered necessary to protect economic vitality and, in the case of some toxic substances, for security purposes, withholding relevant information about the use and release of toxic chemicals could thwart the very purpose of Community Right to Know.

When considering Community Right to Know aspects of its Toxics Reduction Strategy, Ontario should look at the challenges and successes experienced by other jurisdictions' environmental reporting laws and programs.

The ECO will continue to monitor the government's progress with its Toxics Reduction Strategy and Bill 167 to ensure that transparency regarding uses and releases of toxic chemicals remains a government priority.

Review of Application R2008008:

5.2.20 Application for Review of Adequacy of Moscow Landfill Provisional Certificate of Approval (Review Denied by MOE)

Background/Summary of Issues

On October 3, 2008, the applicants requested a review of the Moscow Landfill Site Provisional Certificate of Approval (C of A) No. A370601. The application maintained that the C of A is out of date (it was issued in 1980) and that its terms and conditions are inadequate to protect human health and the environment. There have been no substantial upgrades to this site since the initial C of A. The landfill, which does not have a liner or any leachate collection system, is situated on a site that is mostly comprised of wetlands. In 2006, the Township prepared a design and operations plan that restricts the fill area to the 1.36 hectares of dry land on the site. It then applied for an amendment to the original C of A, but MOE has said that they would not grant an amendment until "outstanding compliance issues" have been resolved. Subsequently, in 2008, the Township initiated expropriation proceedings to take a large parcel of adjacent farmland (all dry, with no wetland), belonging to one of the applicants, with the intent of extending both the size and the life of the landfill. The applicants contend that there is no demonstrable need to keep the landfill open, that there is good reason to believe that to date it has not been operated in compliance with the law, and that it may pose a number of risks to the local environment and to public health.

Ministry Response

The ministry responded on December 10, 2008, by indicating that by the time the application had been received, the ministry had already begun a review of the C of A for the Moscow Landfill and therefore a further review under the *EBR* would be redundant. Accordingly, the application for review was denied. However, the ministry promised to consider the information presented in the application as part of its review and upon completion to share with the applicants the results of its review, including any actions proposed or already undertaken. The ministry further stated that it expected the review to be completed by April 14, 2009, thus falling into the ECO's 2009/2010 reporting year.

ECO Comment

The ECO will be monitoring this case and will review the final outcome of this application in our 2009/2010 Annual Report.

Review of Application R2008009:

5.2.21 Review of the Need to Close the Richmond Landfill Site (Review Denied by MOE)

Geographic Area: Greater Napanee

Background/Summary of Issues

On October 31, 2008, three groups requested that the Ministry of the Environment (MOE) consider substantive amendments to the approvals for the Richmond Landfill site near Napanee, to protect the local environment and public health and safety. The groups are concerned that contaminants are leaching from the site into the underlying groundwater, potentially contaminating drinking water supplies and the local surface waters; and that landfill gas emissions are affecting public health.

According to the applicants, the site's provisional Certificates of Approval (Cs of A) for waste are outdated and inadequate. They believe that MOE has the authority under subsection 39(2) of the *Environmental Protection Act (EPA)* to amend approvals for waste disposal sites when sites: do not comply with the *EPA* or its regulations; may create a nuisance; are not in the public interest; or may result in a hazard to the health or safety of any person. The applicants provided evidence to support their view that all of these grounds have been met for the Richmond Landfill site.

The applicants argued that the amendments should:

- prohibit Waste Management of Canada Corporation (WMCC), the owner and operator of the site since 1996, from accepting any more waste and petroleum-contaminated soil after December 31, 2008:
- impose site closure and post-closure requirements; and
- require WMCC to implement a surface water and groundwater monitoring and reporting program
 to determine the "nature, extent and environmental fate of the leachate plume generated at the
 site."

Background:

The Richmond Landfill site is located in a rural area within the Town of Greater Napanee. It lies within the catchment basin of Marysville Creek, a small creek that runs through the northwest end of the site. The Beechwood Drain collects runoff from the southern part of the site and discharges it into Marysville Creek.

Established in 1954, before approval was required under the EPA, the site accepted waste primarily from local residents. In the 1970s, the site's owner obtained a provisional C of A for waste (No. A371203) allowing it to accept domestic, commercial and non-hazardous solid industrial waste from local municipalities. The provisional C of A was amended in 1987, to allow the site to expand and receive residential, industrial, commercial, institutional, construction and demolition waste from anywhere in Ontario. When the revised C of A was issued in 1987, the approved fill rate was 125,000 tonnes per year and the estimated remaining life span of the site was 19-24 years. In 1993, the site received a second provisional C of A for waste (No. A710003) allowing it to receive non-hazardous petroleum-contaminated soils for use as daily and intermediate cover.

Located on thin soils and highly fractured bedrock, the landfill is comprised of five cells (called phases), which were developed over a number of years. Phase One, the first cell, was constructed according to the practice at the time, without a liner or a leachate containment system. Residential waste was deposited into an open pit and burned, or covered with earth to reduce odours and to control rodents for public health reasons. Leachate from this cell enters the underlying groundwater where it is diluted. Phases Two and Three were constructed with clay liners; and Phases Four and Five had composite clay/plastic liners. The liners were installed before the current standards for landfilling sites came into effect, i.e., O. Reg. 232/98 – Landfilling Sites, made under the *EPA* and according to MOE, would not "prevent the impairment of domestic-use groundwater resources by a number of contaminants." Phases Two through Five were constructed with perimeter drains that collect leachate from the edges of these cells. However, these cells lack collection pipes for collecting leachate from within them.

Since the area is not serviced by a municipal drinking water system, local residents, farmers and businesses rely on wells for their drinking water and other water needs. Only the top layer of groundwater is potable. The lower layer, which begins beneath approximately 30 metres of bedrock, is naturally saline and not potable. If the top layer of groundwater becomes salinized or contaminated with leachate, the wells cannot be deepened to access new fresh water. Moving the wells may not be an option since the entire area has the same geology.

In 1999, MOE approved a Terms of Reference for an environmental assessment (EA) of an undertaking that would have expanded the footprint and increased the capacity of the site. The fill rate would have been increased to 750,000 tonnes per year and the remaining lifespan would have been about 25 years. WMCC estimated the contaminating lifespan of the site to be 300 years. The Government Review Team that reviewed the EA stated, "Given that the landfill is a potential source of groundwater contamination in a susceptible subsurface environment, the Review has ... concluded that there are significant environmental risks associated with expanding the landfill." MOE received approximately 7,000 submissions opposing the proposed expansion and over 1,200 comments supporting the conclusion of the Review.

In November 2006, the Minister of the Environment announced that the EA would not be approved for a number of reasons.

- The proponent failed to develop a suitable plan for demonstrating ongoing regulatory compliance.
- The undertaking did not meet regulatory requirements for protecting groundwater because it did not include a "viable leachate control plan." The minister explained that WMCC had failed to use an acceptable methodology for determining leachate contaminant levels in the groundwater at the site boundary. As a result, WMCC was unable to demonstrate how it would comply with the contaminant criteria, i.e., reasonable use limits, in O. Reg. 232/98 and did not provide a satisfactory explanation for how the proposed undertaking would prevent leachate from moving off-site.
- The environmental effects of the proposed expansion could not be predicted because the impacts of the existing operation were not adequately described in the EA.
- The undertaking did not include a "sound plan to mitigate air emissions."

Furthermore, MOE was "of the opinion that the proponent may not be able to address concerns due to the complexity of the subsurface environment."

Soon after the minister refused the EA, various groups, including the Concerned Citizens' Committee, the Township of Tyendinaga, the Mohawks of the Bay of Quinte and the Town of Greater Napanee began urging MOE to prohibit further waste disposal at the site and to require its prompt closure and post-closure care. MOE advised the groups that, at the current fill rate, the site had a lifespan of two years and that WMCC had been asked to update its on-site groundwater and surface water monitoring plan.

In March 2007, MOE amended provisional C of A No. A371203 to require WMCC to update its 20-year old closure plan within 90 days. The draft closure plan was posted on the Environmental Registry (*EBR*

Registry Number 010-1381) in August 2007 for a 30-day comment period. MOE was still reviewing the draft plan when this application was submitted to the ECO in October 2008.

Summary of Issues:

The applicants contended that the site should be closed permanently and did not understand why MOE is "allowing the closure plan to be developed at such a leisurely pace." The applicants believe that continuing to leave the site open poses serious risks to local air quality, surface water and groundwater.

The applicants provided evidence that MOE had received hundreds of complaints about foul, sickening and rotten odours emanating from the site and were "gravely concerned about the human health risks posed by exposure to landfill gas." A human health toxicologist retained by the applicants explained that landfill gas contains numerous chemicals, such as benzene, toluene and hydrogen sulphide, that can cause headaches, breathing difficulties and other symptoms. During the EA review, WMCC had explained that landfill gases were escaping from cracks in the landfill cover that had developed after wastes had settled.

The applicants were also very concerned about salinization and leachate contamination of the upper layer of potable groundwater and concluded the following from data provided by WMCC and various hydrogeology studies.

- If the site was capped, the estimated volume of leachate generated annually would drop from 22 million litres to 16 million litres.
- Leachate from up to half of the site is leaking into the underlying groundwater.
- The existing leachate collection system and other factors are causing upwelling of the lower saline groundwater into the upper fresh groundwater on the site. Based on data reported by WMCC, chloride levels in some of the monitoring wells on the site have increased over 12 years from less than 150 milligrams per litre (mg/L) to 6,000 21,000 mg/L in 2006. At one well, the chloride level had almost doubled to 41,000 mg/L in 2008 from its 2006 level.

The applicants are worried that off-site groundwater resources and drinking water wells could become salinized, and if salinized groundwater entered Marysville Creek, fish habitat and the aquatic ecosystem would be degraded. A hydrogeologist hired by one of the applicants concluded that there is strong evidence that contaminated groundwater and stormwater runoff from the site are flowing into the nearby surface waters, including Marysville Creek. The applicants cited an MOE statement regarding the site that contamination of drinking water wells is "unlikely to be easily or quickly reversed."

The applicants noted that both MOE and an independent auditor who conducted an audit in 2000 for the Town of Greater Napanee concluded that there was insufficient evidence to support WMCC's claim that leachate had not moved off-site. In fact, the design of the existing monitoring network would not provide the data required to make such a claim. An MOE hydrogeologist noted that due to the fractured nature of the bedrock, the "water conducting capacity of bedrock at this site can change by a factor of 100,000 over less than 100 metres horizontally and three metres vertically." The applicants recommended that the provisional C of A be amended to require "the development and implementation of a robust on-site and off-site groundwater water monitoring/reporting regime to definitively resolve" whether or not leachate has moved off-site. They noted that there are no leachate monitoring wells within the waste pile itself, contrary to normal practice in Ontario, and the list of parameters monitored in the leachate do not include key indicators of leachate contamination, such as benzene and vinyl chloride.

Furthermore, the applicants believe that there is no public need to keep the site open and that WMCC is stalling the closure of the site. According to WMCC, the annual fill rate has fallen from almost 125,000 tonnes annually several years earlier to less than 15,000 tonnes in 2007. Since deposited wastes have settled over time, WMCC's estimate of the lifespan of the site has increased to 2.9 years in 2008, up from 1.6 years in 2007 and 1.1 years in 2005.

The applicants concluded by stating that the site is "fundamentally unsuitable for waste disposal purposes" and that WMCC has had ample time to prepare a "technically sound closure plan." Since

WMCC has failed to do so, the applicants believe that MOE should amend the site's provisional C of A to force WMCC to address the outstanding issues, such as surface water and groundwater monitoring, rather than leaving it to WMCC's discretion and timeline.

Ministry Response

In December 2008, MOE advised the applicants that it was denying the review for two reasons:

- Closure and post-closure requirements will be imposed in WMCC's Closure Plan including on-site
 and off-site surface water and groundwater monitoring and reporting requirements. MOE was
 already reviewing the submitted Closure Plan and C of A at the time the EBR application for
 review as received.
- 2) WMCC and MOE have not identified any impacts to off-site groundwater and the existing environmental monitoring program has not provided any evidence of landfill leachate impacts to surface water.

MOE advised the applicants that it would consider their comments in its review of the proposed closure plan.

In its response, MOE outlined the actions that it has taken over the last few years related to compliance, monitoring and odour, and the outcomes of those actions. MOE explained that it had conducted a full onsite inspection in November 2007, and approximately monthly site visits thereafter. As a result of those visits, MOE had concluded that the site was in compliance with its provisional Cs of A. However, MOE had identified deficiencies in the site's Environmental Monitoring Plan and recommended changes that would enable MOE to determine if WMCC is in compliance with reasonable use limits. In March 2003, MOE ordered WMCC to curb odours on-site and eliminate odour impacts off-site, and in 2006 and 2008, MOE conducted odour surveys during which officers detected landfill gas odours. MOE advised that WMCC plans to take further actions to abate odorous emissions.

In its response, MOE explained that it had forwarded the application to WMCC under section 66(1) of the *Environmental Bill of Rights*, 1993 (*EBR*). WMCC advised MOE that a regulatory review was not required and was not in the public interest. WMCC explained that it has 70 groundwater monitoring wells that are sampled on a semi-annual basis and that it has taken steps to curb odour emissions. WMCC also advised that neither the groundwater nor the surface water monitoring activities have identified any impact of landfill operations on these resources.

Other Information

In our 2005/2006 Annual Report (pages 33 – 38), the ECO explained that there are two sets of regulatory standards that may apply to landfill sites: Regulation 347 – General Waste Management, made under the *EPA*, and O. Reg. 232/98. Regulation 347, which came into force in 1971, outlines some basic environmental protection requirements, such as a prohibition against polluting surface water and groundwater and monitoring a site that has the potential to pollute water. Ontario Regulation 232/98, which came into force in 1998, outlines additional requirements related to surface water and groundwater protection, landfill gas control, leachate contingency plans, and site closure and post-closure care, which apply to some sites only. In the report, the ECO discussed how MOE has failed to ensure that Cs of A of aging landfill sites, particularly those that were approved prior to the 1998 landfill standards coming into force, reflect the newer standards to the extent possible.

After reviewing the proposed closure plan posted in August 2007, MOE reposted it on May 1, 2009 in the form of proposed amendments to provisional C of A No. A371203 for a 30-day comment period. The proposed amendments replace the existing landfill cover, environmental monitoring (surface water, groundwater and landfill gas), annual report and financial assurance conditions with more stringent requirements. The proposed amendments specify the surface water and groundwater quality parameters, including benzene, that WMCC will be required to test for on a periodic basis, and a maximum fill rate of 125,000 tonnes annually. MOE also proposed about one hundred new conditions,

including conditions related to leachate management, odour control and post-closure care. In the Registry notice, MOE explained that although WMCC would not be required to close the site immediately, it would be required to comply with its closure plan when the site reached its approved capacity limit.

A local newspaper reported on May 5, 2009 that the site has a remaining capacity of 50,000 tonnes and is currently receiving about 10,000 tonnes of industrial waste annually. According to the article, WMCC has commented that the lifespan of the site could be extended by reducing the amount of waste received annually.

ECO Comment

MOE was not justified in denying this review. MOE's contention that the "continued operation of the Richmond Landfill in accordance with its Cs of A...does not have [the] potential for harm to the environment" contradicts the expert hydrogeology opinions provided by its own staff and the applicants. MOE's own experts have stated that the lack of compelling evidence of contamination is not proof that it has not occurred or will not occur. Furthermore, MOE has proposed substantive changes to the site's existing provisional C of A – these changes would not have been proposed if the C of A had been fully protective of the environment, determinative and consistent with O. Reg. 232/08. MOE's own statements and actions undermine its decision to deny this review.

The ECO believes that the continued operation of the site poses an unjustified risk to the environment and urges MOE to require the orderly closure of the site immediately. The geology of the area is inherently unsuitable for waste disposal. Hydrogeologists have explained that the fractured nature of the bedrock creates extremely complex contaminant transport flows posing a major challenge for studying the flow of leachate into the groundwater. They have also explained that fractured bedrock provides a very efficient transport route for contaminants; and that the thin soils and bedrock provide no natural attenuation of the contaminants other than dilution by the groundwater. Even after closure, millions of litres of leachate will continue to be produced and discharged to the underlying groundwater. Contamination of the groundwater appears to be inevitable. Closure of the site would lessen the amount of leachate entering the groundwater and therefore the risk.

The ECO is concerned that even a robust monitoring program will not reliably detect groundwater contamination and will not provide sufficient lead time to implement protective measures. Remediation of groundwater is challenging and expensive, and is generally not possible unless the source of the contamination is eliminated. Based on the information provided by various hydrogeologists, the ECO doubts that WMCC would be able to prevent substantial amounts of leachate from entering the groundwater.

By its own admission, WMCC is receiving only about 10 per cent of historical volumes of waste at the site and a trivial per cent of what was requested in the proposed expansion. Neither MOE nor WMCC has identified any pressing need or public good for allowing the site to continue to receive wastes. For this reason, the ECO does not believe that there would be any undue social or economic hardship to the area if the site was closed.

In conclusion, the ECO believes that there are compelling environmental reasons for MOE to require the immediate, orderly closure of the site and no compelling social or economic reasons for continuing to keep it open.

Review of Application R2008010:

5.2.22 Review of the Need to Amend the Air Approval for Kiley Paving Ltd. (Review Undertaken by MOE and then Cancelled)

Geographic Area: Kingston

Background/Summary of Issues

In November 2008, the applicants requested a review of the Certificate of Approval (C of A) for Air and Noise granted to Kiley Paving Ltd. ("Kiley") allowing it to operate a hot mix asphalt plant. The applicants requested that the C of A be revoked or substantially amended, and provided evidence to support their contentions that the plant:

- was not needed;
- had been operating out-of-compliance with legislation and its C of A; and
- was discharging noise, odour and toxic substances potentially causing harm to the environment and public health.

According to the applicants, Kiley did not obtain its C of A for operating its hot mix asphalt plant until June 2005, almost a year after it became operational, and after neighbours began complaining about nauseating and putrid odours, and breathing difficulties. The C of A, which included a condition to comply with provincial noise guidelines, did not include a similar condition for odour. The plant is located in the Hendricks Aggregate Quarry approximately 2.5 kilometres south of the hamlet of Wilton near Kingston, Ontario.

The applicants provided evidence that MOE relied on erroneous information when it approved the C of A. For example, maps included in the air study did not identify the locations of the village and some of the plant's neighbours. The applicants also discovered that the noise study had categorized the area as Class 2 (Urban), which has less stringent allowable maximum noise levels than rural areas. When an Air Quality Specialist with MOE reviewed the air study in 2008, he noted an error that potentially underestimated odorous emissions by a factor of more than 20. Based on these findings and others described in the applicants' request for review, the applicants contended that the C of A contained incorrect information and was missing important terms and conditions.

The application was sent to the Ministry of the Environment (MOE).

Ministry Response

On January 15, 2009, MOE agreed to undertake the review of the C of A. Soon after, on April 6, 2009, Kiley asked that its C of A be revoked. As a consequence, MOE advised the ECO on April 24, 2009 that this review under the *EBR* was no longer necessary.

ECO Comment

The ECO will review this application in our 2009/2010 Annual Report.

Review of Applications R2008011, R2008012 and R2008013:

5.2.23 Review of all Instruments and Permits Granted to Further the York Durham Sewer System and the Oak Ridges Moraine Conservation Plan

(Reviews Denied by MOE and MMAH; Returned by MNR)

Background/Summary of Issues

On November 20, 2008, the applicants requested that the Ministry of the Environment (MOE) and Ministry of Natural Resources (MNR) review all regulations and instruments that apply to the extension of the York Durham Sewer System (YDSS), a very large municipal wastewater collection system spanning approximately 187 kilometres across York and Durham Regions. The applicants also requested that the Ministry of Municipal Affairs and Housing (MMAH) review the Oak Ridges Moraine Conservation Plan (ORMCP). The following table provides a complete list of all regulations and instruments requested for review. The review focused primarily on the following projects:

- Lower 9th Line (Box Grove to Little Rouge Creek)
- 16th Avenue Phase I (9th Line to Stone Mason Drive)
- 16th Avenue Phase II (Stone Mason Drive to Warden Avenue)
- Upper 9th Line (from Little Rouge Creek to Stouffville)
- Southeast Collector (Monitoring only)

Applicants Requested Reviews of the Following Regulations and Instruments	Ministry
Used to Extend the YDSS	Responsible
Oak Ridges Moraine Conservation Plan (Oak Ridges Moraine Conservation Act, 2001,	MMAH
O. Reg. 140/02)	
All instruments granted to further the YDSS including:	MOE
a) Consolidated Class Environmental Assessment for sewer and water servicing	
(May, 1996)	
b) York-Durham Trunk Sewer System Class Environmental Assessment	
c) YDSS Southeast Collector Trunk Sewer Individual Environmental Assessment	
d) 16 th Avenue Regional Trunk Sewer, Phase II – all instruments and related	
environmental assessments	
e) Mid-project Environmental Assessments (January, 2005)	
Letter imposing conditions on Class Environmental Assessment projects, Minister of	MOE
the Environment to Region of York (October 1, 2004)	
Six permits to take water (PTTW) issued under the Ontario Water Resources Act to	MOE
further the development of the YDSS (2000 – 2005)	
Five Toronto and Region Conservation Authority permits (Conservation Authorities Act,	MNR
O. Reg. 158 and O. Reg. 166/06)	
Certificate of Approval Municipal and Private Sewage Works – Sanitary Sewers (June	MOE
30, 2005) under the Ontario Water Resources Act	
16 th Avenue Trunk Sewer Phase II, Environmental Management Plan Report (May	MOE
2004)	
Approvals under the Lakes and Rivers Improvement Act	MNR

The applicants stated that approvals for extending the YDSS are based on "inadequate, insufficient, or false supporting data, provide deficient assessment of the impact on the natural environment and the adverse environmental consequences of the undertaking(s), offer inadequate mitigation measures and/or fail to comply with the regulation and/or conditions of approval." The applicants provided extensive and detailed technical documentation to support their contention that the construction of the YDSS resulted in:

- "undisclosed groundwater interference on a watershed scale;
- Loss of stream base flow:

- Under predicted and/ or understated zones of influence areas for mitigation measures; and
- Damages to rural ratepayers."

The applicants recommended that MOE amend the applicable Permits to Take Water (PTTW) issued to require monitoring until stable water levels are evident at all regional and private monitoring wells. Also, the applicants recommended that the monitoring period be extended to December 31, 2012, to allow dewatered aquifers to recover. The applicants recommended that MOE enforce existing PTTW conditions, such as the requirement to rehabilitate and/or replace no longer functional monitoring wells and assess aquifer water quality conditions. The applicants requested that MOE direct York Region (the Region) to provide information related to new and replacement water wells drilled since April 13, 2000 including well water level monitoring and production data, well interference complaints with investigation results, technical reports, and project finances. The applicants also requested that MOE provide access to digital mapping and copies of well records, with owners' names. Lastly, the applicants recommended that MOE award compensation for damages and costs to landowners affected by dewatering groundwater aguifers.

Background: The Big Pipe:

In 1965, the Province of Ontario decided the Humber, Don and Rouge Rivers could not support any additional wastewater flow from the local communities and that no additional sewage treatment plants could be built on these watercourses. As a result of this overall policy decision, the Ontario government began to develop new programs to promote a centralized sewage treatment system and replace individual septic systems. In the early 1970s, it also became apparent that Lake Simcoe could not accept sewage system waste from the Region. There was additional pressure after Canada and the United States of America signed the Great Lakes Water Quality Agreement in 1978. Design and construction of the first phase of the YDSS – or the "big pipe," a network of pipes, pumping stations and one major treatment plant, was completed in the late 1970s and early 1980s. The system collects wastewater from the municipalities of Aurora, Newmarket, Markham, Richmond Hill, and Vaughan, converges at the Duffin Creek Water Pollution Control Plant located in Pickering, and discharges treated wastewater into Lake Ontario.

In the 1990s, the Region began expanding the YDSS to service the communities of King City, Nobleton, Holland Landing, Queensville and Stouffville in response to rapid population growth, and projected water demands to accommodate future growth. The Region's population grew from 506,000 in 1997 to 950,000 in 2006 and it is anticipated that it will increase to 1.5 million by 2031 to meet growth targets under the Growth Plan for the Greater Golden Horseshoe (GGH Plan). The sewer expansion was assessed under 14 separate Class Environmental Assessment (Class EA) projects under the *Environmental Assessment Act.* In response to concern that the expansion was being "piecemealed" by separate Class EA projects, the Region completed a Master Plan under the Municipal Class EA in 1997 (updated in 2004). However, Class EA studies were completed or almost completed for King City (1994), Nobleton (1994), and Holland Landing (1995) before the Master Plan was initiated.

Expanding the YDSS is a controversial issue and has met great opposition from local residents, environmental groups and municipalities. There are concerns that the piecemeal approach led to fragmented decision-making, and that the expansion encourages urban sprawl, and harms the local ecosystem. For example, in 2004 MOE received a "bump-up" request that the Region prepare individual environmental assessments for all unfinished sections of the YDSS. The Minister of the Environment determined that an individual environmental assessment was warranted for one project (Southeast Collector project) and imposed a number of conditions on eight additional projects.

Public concern was also demonstrated in 2004 when the ECO received an application under the *Environmental Bill of Rights, 1993 (EBR)* to review the King City Regional Sewage Pumping Station Certificate of Approval (C of A) allowing the construction of a six kilometre sewage pipe from King City to the YDSS. MOE denied the applicants' request to revoke the C of A or to include additional conditions (for more information, see page 254-258 of the Supplement to the ECO 2004/2005 Annual Report). In another related case, the Minister of the Environment imposed additional conditions on the Duffin Creek

sewage treatment plant in 2006 after the town of Ajax requested a Class EA "bump-up" because of odour and water quality concerns.

Dewatering:

Between 2000 and 2007, the Region began to temporarily lower the groundwater level in the Town of Markham by pumping the aquifers to safely construct the tunnels and shafts of the 16th Avenue trunk sewer project. The applicants asserted that during this period, the Region extracted 40.1 billion litres of groundwater from aquifers connected to the Oak Ridges Moraine and that the Region greatly underestimated by about five times the peak and steady state dewatering requirements at one shaft. The applicants argued that the Region underestimated dewatering quantities and project area of influence, determined by modelling and other techniques. Since the area of influence was underestimated, the applicants stated that environmental monitoring was insufficient and landowners outside the "zone of influence" were denied support under the Region's well mitigation plan and are "now saddled with ongoing water treatment costs."

Construction of the 16th Avenue Phase I Sewer project was completed in December 2003. For Phase II, construction and construction related dewatering was completed by August 2007. The applicants stated that although some areas are demonstrating 80 per cent aquifer recovery (e.g., Stone Mason Drive and 16th Avenue shaft C8) other areas have only recovered 20 per cent (e.g., Spring Creek Well and Little Rouge Creek).

Ministry Response

Ministry of Natural Resources:

On December 19, 2008, MNR returned the application to the ECO stating that it "cannot be reviewed by this ministry under the provision of Part IV of the *EBR* as the instruments brought forward in the application for review have been considered and issued by the Toronto and Region Conservation Authority."

Ministry of Municipal Affairs and Housing:

On January 19, 2009, MMAH determined that a review of the ORMCP was not warranted. The ministry asserted that the ORMCP contains "policies that provide strong land use planning policy direction for protection water resources, including the protection of both sensitive and vulnerable surface and ground water features of the Moraine and for the consideration of infrastructure projects (e.g., sewage and water systems)." MMAH stated that it considered the extent to which members of the public had an opportunity to participate in the development of the plan. MMAH outlined that it undertook "extensive public consultation" such as public consultation meetings, inter-ministry working groups, and the establishment of a minister's advisory panel and task force during the development of the ORMCP, *Greenbelt Act, 2005* and the Greenbelt Plan. The ministry indicated that the ORMCP and the Greenbelt Plan are scheduled for review in 2015 and that it is currently developing performance monitoring measures to assess the effectiveness of both land use plans.

Ministry of the Environment:

On January 20, 2008, MOE denied the application for review for all matters within its responsibility. The ministry stated that in 2002 it reviewed and provided comments on the YDSS Master Plan and that "deficiencies in monitoring, mitigation and remediation proposals for the 16th Avenue Regional Trunk Sewer Phase II project arising from construction dewatering and discharge impacts... were addressed by detailed mitigation plans." MOE stated that all non-compliance issues with the Class EA conditions have been addressed and that monitoring conditions have been satisfied or are ongoing.

MOE concluded that "since there have been no unpredicted issues associated with the decisions and conditions listed in the Minister's letter, construction work on various projects has been completed and aquifer recoveries are proceeding to the satisfaction of MOE and there is no need to review the Minister's letter." MOE stated that all PTTWs issued to further the YDSS, the C of A for municipal and private sewage works – sanitary sewers, and the 16th Avenue Trunk Sewer Phase 2 Environmental Management Plan were extensively reviewed and that MOE's position has not changed since the review.

In response to the applicants' recommendations, MOE clarified that no PTTWs will expire until groundwater has recovered and remains stable to 80 per cent of pre-construction levels. MOE stated that it is satisfied that all conditions of the January 31, 2005 PTTW have been met.

In response to the applicants' request for information, MOE stated the information request was not considered in the *EBR* application. MOE encouraged the applicants to submit their request to the Region. MOE stated it could not provide access to provincial digital mapping data because it would violate software licensing requirements. In addition, MOE stated that providing copies of well water records with owners' names would be a contravention of the *Freedom of Information and Protection of Privacy Act*.

MOE advised the applicants that it "has no position on [the] request for the awarding of damages and costs with respect to the ongoing determination and the resultant remediation and ratepayer compensation."

ECO Comment

The ECO accepts MNR's decision to return this *EBR* application and not review *Conservation Authorities Act* permits in question. These permits are not prescribed as instruments under the *EBR* and therefore, are not subject to review.

The ECO is uncertain whether a review of the Oak Ridges Moraine Conservation Plan was warranted or not as MMAH's preliminary review of the application was insufficient. MMAH provided a description the public consultation undertaken during the development of the plan and that a review of the plan will occur in 2015. MMAH asserted that the Oak Ridges Moraine Conservation Plan policies provide enough direction to protect water. However, MMAH did not provide any indication that it reviewed the evidence provided by the applicants in making its decision. Specifically, MMAH did not address the applicants concern that construction of the YDSS negatively impacted groundwater in the Oak Ridges Moraine. The intent of the Oak Ridges Moraine Plan is to provide additional environmental protection to a sensitive landform and the MMAH should ensure that it is effectively doing so.

MOE's decision to not undertake individual reviews of all regulations and instruments used to expand the York Durham Sewer System (YDSS) was reasonable. However, the ECO believes that MOE missed an opportunity to conduct a review of the larger story – in effect, a post mortem of the oversight role that MOE and other agencies provided. This was a very lengthy and enormous project, with planning decisions and construction stretching over decades. The environmental impacts include not only the direct impacts of construction, but the gradual transformation of an agricultural region into vast residential subdivisions. It remains unclear the magnitude of environmental harm that resulted but clearly harm has been done. The applicants raised valid concerns with the planning, construction and monitoring of the project(s) and effectively illustrated ongoing issues with the YDSS. There certainly were things that went wrong and there are lessons to be learned for the future. The ECO is disappointed that MOE and MMAH did not address environmental harm in their responses and reviews. The ECO believes that a thorough review was warranted to completely understand the extent of environmental harm caused by this project.

The ECO is disappointed that MOE did not recognize substantive environmental problems with the project such as underestimating the impact of dewatering and the rate of groundwater and surface water recovery. Ontarians rely on MOE to oversee and scrutinize hydrogeology models and technical data for projects of this scale. MOE could have used this opportunity to evaluate its own technical capacity to perform this vital role. Many other southern Ontario communities such as the City of Guelph and the Region of Waterloo are facing similar challenges to York and Durham Regions - managing population growth with water and wastewater needs. As a key regulating agency, MOE needs to be sure its vision, evaluation processes and skill sets are up to the job.

In our 2006/2007 Annual Report (pages 22-28), the ECO commented on the long-term sustainability problems of major infrastructure projects designed to artificially expand the carrying capacity of communities by piping water and wastewater in and out. Such very large and complex systems become

completely dependent on distant water supplies. Alternative, small-scale or experimental approaches to water supply, storage, use and treatment are eliminated as inefficient options. The remaining system does have the advantage of being highly efficient, but only as long as environmental conditions remain stable. The system's underlying loss of resilience may become apparent as new environmental stresses arise, such as droughts and extreme weather events brought about by climate change. The ECO believes a review was warranted by MOE to aid these communities in preventing similar occurrences and damages to the ecosystem when faced with the challenge of managing water and wastewater infrastructure, protecting the environment, and accommodating future growth imposed by the GGH plan.

Review of Application R2008014:

5.2.24 Request for Review of the Need for Air Pollution Hot Spots Regulatory Reform (Review Undertaken by MOE)

Background/Summary of Issues

On January 30, 2009, the ECO received an application requesting a review of the need for a new regulatory framework to fill existing regulatory gaps in Ontario's air pollution laws related to cumulative impacts of pollution, particularly air pollution "hot spots." Hot spots are described by the applicants as "multi-pollutant, multi-facility areas with significant background levels of pollutants or pollutant levels from local sources that exceed toxic air pollutant standards and areas impacted by persistent, bioaccumulative, toxic air pollutants from industrial sources."

The applicants are concerned that air pollution hot spots in Ontario threaten the physical and psychological health of people living in those areas, and compromise their right to live in a healthful environment. They cited the environmental health crisis in the community of Aamjinaang First Nation near Sarnia, Ontario, an air pollution hot spot area known as "Chemical Valley," as evidence of significant deficiencies in the air pollution regulatory regime. The applicants assert that the current regulatory framework is "unable to adequately protect the environment or human health from the dangers associated with air pollution."

The applicants asked the Ministry of the Environment (MOE) to:

- Identify Pollution Hot Spots areas in Ontario requiring pollution reduction plans;
- Regulate air pollution in hot spot areas using a cumulative effects approach;
- Require that any assessment, report or estimate of emissions and/or pollutant concentrations include background levels of pollution;
- Require MOE standards to be ratcheted down over regulated enforceable timelines;
- Make the reduction of emissions of persistent and bioaccumulative pollutants a priority;
- Require that "maximum achievable control technologies" and "lowest achievable emission rates" be used to achieve a reduction of overall emissions;
- Require ongoing monitoring of emission sources at industrial facilities;
- Engage community members and industry in the development of pollution reduction plans;
- Prohibit the issuance of new or amended Certificates of Approval (Cs of A) while pollution reduction plans are being developed, unless the approvals would result in a reduction of emissions; and
- Ensure that pollution reduction plans set out maximum limits on pollution that can be approved by MOE under the C of A process.

The ECO forwarded the application to MOE.

Ministry Response

By letter dated May 11, 2009, MOE notified the applicants that it would undertake the requested review. MOE stated that it is

committed to developing the long-term tools, including science, policies and guidelines to support the application of an ecosystem approach, including consideration of cumulative effects. As such the ministry is currently reviewing how it applies the principles of its Statement of Environmental Values (SEV), including cumulative effects assessment and the ecosystem approach, in its environmentally significant decision making.

The ministry advised the applicants that, as part of its review of the environmental decision-making process, it would review the matters raised in the application. The ministry noted that if the review concludes that the current framework warrants revision, the ministry "will actively engage the regulated community, local residents, and other stakeholders."

ECO Comment

The ECO is pleased that MOE has agreed to undertake this review. As MOE's review is ongoing, the ECO will report on the ministry's handling of this application and the outcome of the review in a future reporting year.

Review of Application R2008015:

5.2.25 Request for Review of C of A (Air) for Biedermann Packaging Inc. (Review Undertaken by MOE)

Background/Summary of Issues

On February 10, 2009, the ECO received an application requesting a review of Certificate of Approval (Air) Number 8-2115-80-987 ("C of A"), issued by the Ministry of the Environment (MOE) to Wilson Laboratories Inc., now operating as Biedermann Packaging. The C of A applies to Biedermann Packaging's agricultural pesticide mixing, manufacturing and packaging facility in Dundas, Ontario.

The applicants expressed concern that the C of A does not include any description of the nature of the activities that take place at the facility, and that "the instrument may not contain conditions suitable for protecting human health and the environment from the types of chemicals that are actually manufactured at the facility." The applicants believe that a review is necessary to ensure that the provincial approvals for the facility accurately describe and effectively regulate the activities at the site. The applicants sought the following action from MOE, via the requested review:

- Demonstration that the company's emission control system is adequately protective of human health and the environment;
- A review of the company's Operations and Maintenance Manual;
- An evaluation of the effectiveness of the circular silencer to provide noise mitigation for the fan exhaust system;
- Inclusion of an accurate description in the C of A of the activity for which emission controls are required, including a list of chemicals used; and
- Administrative updates to the C of A to name the current operator of the facility.

The same applicants had previously submitted a similar request for review of Biedermann Packaging's Certificate of Approval for sewage works. For more information on that application (R2007032), refer to Section 5 of this Supplement.

The ECO forwarded the application to MOE.

Ministry Response

By letter dated April 3, 2009, MOE informed the applicants that it had completed its preliminary review, including a review of Biedermann Packaging's comments on the issues raised in the application. MOE decided that in the circumstances, a technical review of the C of A is warranted. MOE stated that it would also make any administrative changes to the C of A that the Director considers appropriate. In addition, MOE agreed to review the Operations and Maintenance Manual and consider whether any changes to that document are warranted.

MOE estimated that its review would take two months to complete.

ECO Comment

The ECO will review the handling of this application in the 2009/2010 Annual Report.

Review of Application R2008016:

5.2.26 Application for a Review of an existing *Permit To Take Water* (PTTW) # 7043-74BL3K, Issued to Nestlé Waters Canada (Review Denied by MOE)

Background/Summary of Issues

On March 16, 2009, the applicants requested that the Ministry of Environment (MOE) review the PTTW that it issued on April 17, 2008 to Nestlé Waters Canada for its facility/source in Aberfoyle, Ontario. The applicants state that the decision to issue this permit was not consistent with the ministry's Statement of Environmental Values (SEV) and that given the recent Lafarge decision (see Part 9 of this year's Annual Report), MOE should review the decision to grant the permit.

The applicants referred to the following MOE SEV principles:

- Adopting an ecosystem approach to environmental protection;
- Considering the cumulative effects on the environment:
- Considering the effects of decisions on future generations; and,
- Using a precautionary, science-based approach in decision-making.

The reasons given by the applicants for stating that these principles were not consistent with the decision to grant the permit can be summarized as follows:

- Nestlé draws its water from the same aquifer as the City of Guelph, whose Water Supply Master Plan warned in 2006 of increasing pressure on its water supply. The applicants state that this contradicts the "consideration of future generations" principle.
- Nestlé's own data show occasional water flow reversals from Mill Creek (a local watercourse) to the underground aquifer, presumably due to the reduction in aquifer levels caused by the water taking. The applicants expressed a concern that this could result in the contamination of that

- aquifer, putting peoples' health at risk. Given this concern, they argued that the permit would seem to contradict the "precautionary principle".
- A hydrogeological consultant hired by the Township of Puslinch determined that Nestlé's taking of
 water could potentially cause damage to the local ecosystem by reducing the flow of ground
 water to Mill Creek, lowering the creek's levels and inhibiting its natural cooling cycle. The
 applicants felt that this risk showed that the decision to award the permit contradicts the
 "cumulative impacts", "ecosystem approach" and "precautionary" principles.
- Nestle's activities (selling bottled water) result in large quantities of water being removed from the watershed. The applicants state that this violates the "ecosystem approach" principle.

Ministry Response

The ministry denied the review in a letter to the applicants dated May 29, 2009. A decision summary was attached.

ECO Comment

Since MOE's decision was received two months after the completion of ECO's 2008/2009 reporting year, the ECO will review the outcome of this application in our 2009/2010 Annual Report.

5.3 Ministry of Municipal Affairs and Housing

Review of Applications R2007007, R2007008 and R2007009:

5.3.1 The Need for Municipal Climate Change Adaptation Strategies (Review Undertaken by MOE, Denied by MMAH and MNR)

This application was reviewed in conjunction with R2007007 (MOE) and R2007009 (MNR). Please see the Ministry of the Environment portion of this Section for the full review.

Review of Applications R2008011, R2008012 and R2008013:

5.3.2 Review of all Instruments and Permits Granted to Further the York Durham Sewer System and the Oak Ridges Moraine Conservation Plan
(Reviews Denied by MOE and MMAH, Returned by MNR)

This application was reviewed in conjunction with R2008011 (MOE) and R2008012 (MNR). Please see the Ministry of the Environment portion of this Section for the full review.

5.4 Ministry of Natural Resources

Review of Application R2006015:

5.4.1 Measures to Conserve Woodland Caribou (*Rangifer tarandus caribou*) and its Habitat (Review Undertaken by MNR)

Background/Summary of Issues

In October 2006, an application for review was submitted that raised concerns with the sufficiency of the measures that the Ontario government has in place to conserve woodland caribou (*Rangifer tarandus caribou*). The ECO forwarded this application to the Ministry of Natural Resources (MNR), the Ministry of Northern Development and Mines (MNDM), the Ministry of the Environment (MOE), and the Ministry of Energy (ENG).

This *EBR* application was discussed on pages 75-81 of the ECO's 2006/2007 Annual Report. It also was discussed at length on pages 194-201 in the Supplement to our 2006/2007 Annual Report and on pages 263-265 in the Supplement to the 2007/2008 Annual Report.

All of the ministries denied this *EBR* application, except MNR who chose to undertake a "scoped review." MNR originally informed the ECO that this review will be completed by February 2008. The ministry subsequently told the ECO that this review would be completed by June 2009.

The applicants asserted that this review is warranted and in the public interest for the following reasons:

- The activity of sustainable forest management, inclusive of managing for wildlife and wildlife habitat, occurs within public forests in Ontario;
- Widespread loss of caribou habitat in Ontario (including the majority of the area allocated to 'sustainable forest management') is well-documented, contributing to its status as a "threatened" species nationally:
- An important component of the mandate of the Ministry of Natural Resources, as expressed in their Statement of Environmental Values, is the stewardship obligation to the conservation of this forest species and its habitat;
- The linkages between habitat loss and the expansion of industrial forest harvesting are well established guidelines provided to Sustainable Forest Licence holders by the Ministry of Natural Resources are a critical tool for implementing MNR's obligations in the forest;
- Without documented improvements in managing the impacts of industrial forestry upon caribou, further loss of habitat is predictable;
- Without this review, it is unlikely that MNR will affect a timely review of its own, given the history
 of the subject guidance;
- Without this review, it is predictable that a further period of years will elapse in the name of "recovery planning", contributing to the current dire pressures on this species without any clearer direction being provided to harvesters operating around Caribou habitat; and
- In more than one audit performed on operations in Ontario under the requirements of the CFSA, independent auditors of forest management units containing caribou have raised concerns about the implementation and/or likelihood of success of caribou guidance provided by MNR to forest management planners.

The applicants were concerned that "while the government continues to delay actual (on the ground) implementation of a caribou recovery strategy, status quo industrial development continues... in critical caribou habitat." They expressed concern that the existing guidance is only applicable to forestry operations on Crown land and that there is "no sound premise for assuming that the well-documented

range recession of caribou in the face of industrial forest harvesting will be held in check." The applicants stated that these other forms of development include mining and mineral exploration activities, road building and hydroelectric development.

The applicants requested that the existing regulatory framework that guides the management of woodland caribou be reviewed. This regulatory framework includes MNR's Class Environmental Assessment Approval for Forest Management on Crown Lands in Ontario (Declaration Order MNR-71), the Provincial Wildlife Population Monitoring Program, the *Crown Forest Sustainability Act*, the Forest Management Guidelines for the Conservation of Woodland Caribou, the Natural Disturbance Emulation Guideline, the Forest Fire Management Strategy for Ontario, and the "draft" Recovery Strategy for Forest-dwelling Woodland Caribou (*Rangifer tarandus caribou*) in Ontario.

The applicants stated that many components of this regulatory regime have been in place for a significant period of time, but that their effectiveness has not been comprehensively examined. For example, the Forest Management Guidelines for the Conservation of Woodland Caribou that apply to northwestern Ontario have been in place since 1994 and no assessment has ever been made public as to its actual effect on this species at risk. Further, the applicants stated that a similar guideline for northeastern Ontario is "rumoured to exist," but that it has never been made public. The applicants expressed concern that this lack of a guideline for northeastern Ontario gives the appearance that this area is a "lower priority" despite the fact that it too has been identified as an area for the recovery of woodland caribou.

Ministry Response

In February 2007, the Ministry of Natural Resources determined that this *EBR* application warranted a self-described "scoped review" of the ministry's monitoring provisions related to woodland caribou and their habitat. MNR stated that this review would be completed by February 2008.

MNR stated that its "existing, scheduled, and planned activities" address the majority of concerns raised by the applicants and there is no potential for harm to the environment (i.e., woodland caribou) in not undertaking the full review. On this basis, MNR stated a "comprehensive" review is unwarranted as:

- MNR has already begun the Caribou Conservation Framework (CCF) initiative which will address
 the majority of the applicants' concerns related to MNR's areas of administration. The CCF,
 planned for completion in the fall of 2007, will include public consultation with a goal to provide
 comprehensive direction for appropriate caribou policy and the development of action plans in
 response to the provincial Recovery Strategy for Forest-Dwelling Woodland Caribou in Ontario.
- The Crown Forest Sustainability Act (CFSA), the Provincial Parks Act (PPA), the Environmental Assessment Act (EAA) and related regulations, policies and guides, including the Forest Management Planning Manual, provide significant guidance for ongoing protection of woodland caribou. All of these were developed with full public review and consultation.
- MNR is currently formulating new habitat guidance for woodland caribou through development of the forest Landscape Guide and Stand/Site Guide and is also undertaking a review of the provincial *Endangered Species Act*. Each of these initiatives have had extensive stakeholder and public involvement.

Forest management planning is conducted in accordance with the *Crown Forest Sustainability Act* and Declaration Order MNR-71 (replacing the Timber Management Class EA that applied between 1994 and 2003). The ministry states that in forest management units with populations of woodland caribou, objectives for woodland caribou management are established by planning teams and the provision of habitat is a priority. Additionally, MNR has been applying the Forest Management Guidelines for the Conservation of Woodland Caribou in northwestern Ontario since 1994.

The ministry also noted that it is in the process of consolidating its 34 forest management guidelines into five new guidelines. MNR stated that these new guidelines would be finalized in 2007. As part of this consolidation, MNR would no longer be using its Forest Management Guidelines for the Conservation of

Woodland Caribou. The new guidelines will provide "one approach to planning that is consistent for all woodland caribou range while recognizing differences in ecology and landscapes."

The conservation of this species has been an important factor in the establishment of several protected areas. MNR stated that management plans for protected areas within woodland caribou range address objectives for the species. The ministry explained that the park planning process provides "existing opportunities for review, meeting the public interest for transparency and public consultation."

MNR stated that it recently reviewed the sufficiency of its research and monitoring information on woodland caribou. Based on this review, MNR then "conducted an extensive survey of its staff as well as non-governmental individuals and organizations in Ontario to determine research priorities." The ministry also hosted a research workshop in the fall of 2006.

The ministry also stated that it was in the process of reviewing the *Endangered Species Act* (*ESA*). MNR states that the new legislation "will enhance the protection of endangered and threatened species (such as woodland caribou) and their habitats."

ECO Comment

MNR did not deny this application, but rather chose to conduct what it described as a "scoped review" of its monitoring provisions for woodland caribou and their habitat. MNR originally stated that this review would be completed by February 2008; the ministry then revised the date to June 2009. When MNR does complete its "scoped review," the ECO will report on it in detail.

The *Environmental Bill of Rights, 1993 (EBR)* directs that a review shall be conducted within "a reasonable time." This application was submitted in October 2006 and MNR now has committed to completing the review by June 2009. The ECO believes that this is an unreasonable delay. MNR's delay on this application seriously undermines the basic purposes of accountability and transparency found in the *EBR*.

In its February 2007 response to the applicants, MNR relied heavily on its unreleased Caribou Conservation Framework to allay any possible concerns about the vulnerability of this species and its habitat. MNR told the applicants and the ECO that this framework would be released in the fall of 2007; this framework is now targeted for release in June 2009. The ministry also committed to regulating the habitat of the forest-dwelling population of woodland caribou under the *Endangered Species Act*, 2007 by June 2009. Further, MNR has targeted the fall of 2009 to release its new Forest Management Guide for Boreal Landscapes that will apply to the habitat of woodland caribou. The ECO will review the framework, habitat regulation, and forest management guide in a future Annual Report.

Review of Applications R2007007, R2007008 and R2007009:

The Need for Municipal Climate Change Adaptation Strategies (Review Undertaken by MOE, Denied by MMAH and MNR)

This application was reviewed in conjunction with R2007007 (MOE) and R2007008 (MMAH). Please see the Ministry of the Environment portion of this Section for the full review.

Review of Applications R2007023, and R2007030:

5.4.2 Request to Regulate Wolf Lake Old Growth Forest Reserve (Reviews Denied by MNR and MNDM)

Geographic Area: Townships of Mackelcan and Rathbun

Background/Summary of Issues

In January 2008, two applicants requested that the Ministry of Natural Resources (MNR) regulate Wolf Lake Old Growth Forest Reserve as a protected area under the *Provincial Parks and Conservation Reserves Act, 2006 (PPCRA)*. Alternatively, the applicants requested that MNR find a comparable contiguous area of red pine old growth in the immediate area to regulate as a provincial park.

Background:

In August 1990, MNR commissioned a life science resource assessment of five areas in Ontario containing old white and red pine, including the Wolf Lake region located approximately 50 kilometres northeast of Sudbury. The report found that the Wolf Lake site represents the largest contiguous area of red pine older than 140 years in the site region and that the association of dense red pine overstories with abundant white pine regeneration is unique to the Wolf Lake area. Moreover, the report concluded that "...the Wolf Lake site is unique, in relation to the other five areas assessed, given its contiguous stands of mature red pine, its fire history, and its viewscapes." MNR also states that this area "may be the largest remaining contiguous old growth red pine dominated forest in North America."

Old growth forests help maintain biodiversity, provide critical habitat for a multitude of species, and play a role in maintaining ecosystems and ecological processes. Being situated along the Matagamasi to Chiniquchi Lake canoe route, the Wolf Lake area has outstanding recreational and wilderness values.

In 1999, MNR released Ontario's Living Legacy (OLL) Land Use Strategy, which recommended the creation of 378 new protected areas on Crown lands in Ontario. It was later determined, however, that 66 of these proposed provincial parks and conservation reserves either already had mining claims when they were proposed, or were staked before MNR requested that the Ministry of Northern Development and Mines (MNDM) remove these areas from eligibility for staking.

One of the protected areas proposed in OLL that contains land with existing mining claims is Chiniguchi Provincial Park. In 1999, lands within this proposed park that overlapped with existing mining lands were designated as three forest reserves, one of which is Wolf Lake Old Growth Forest Reserve (2,386 ha). Forest reserves are "areas where protection of natural heritage and special landscapes is a priority, but some resource use can take place with appropriate conditions." Under this designation, mineral exploration, mining and related access is allowed while commercial timber harvest and new hydroelectric power development are not.

The OLL Land Use Strategy directs that "[Wolf Lake Old Growth Forest Reserve] areas not under mining tenure will be regulated as part of the proposed Chiniguchi Provincial Park. If mining tenure is surrendered by the tenure owner through normal processes, these areas will be withdrawn under the *Mining Act* and added to the provincial park."

Shortly after the Wolf Lake Old Growth Forest Reserve was created, a large portion of claims within the reserve lapsed and these lands (totaling 1773 ha) were subsequently withdrawn and allocated for Chiniguchi Provincial Park, which is now regulated under the *PPCRA*. In the Land Use Amendment for this reallocation of lands, MNR stated that "mining tenure in portions of these sites has now lapsed; therefore, the intended land use designation for these portions can now be realized and brought forward to regulation."

In 2002, MNDM and MNR committed to considering options for separating or addressing mineral lands on or within OLL forest reserves. This process, known as "disentanglement," was undertaken in response to concerns that the overlap of proposed protected areas and existing mining claims discourages investment in mining exploration and development (and creates uncertainty about the timing for the regulation of these lands as protected areas). From mid-2002 to June 2004, with assistance from government staff, the Ontario Prospectors Association and the Partnership for Public Lands developed recommendations to separate pre-existing mining lands from the recommended protected areas on a total of 66 sites. The groups provided joint recommendations on 55 sites, but could not reach consensus on the remaining 11 sites, one of which was Wolf Lake Old Growth Forest Reserve. The government subsequently developed proposed strategies for the remaining 11 sites.

In May 2005, MNR posted an information notice on the Environmental Registry reflecting the government's "approved proposals" for the 66 disentanglement sites. For the Wolf Lake Old Growth Forest Reserve, MNR proposed removing the forest reserve designation, re-designating the area to a general use area or enhanced management area, and seeking replacement areas. MNR has begun preconsultation with First Nations and other stakeholders in an effort to seek a consensus on the disentanglement proposal for this forest reserve.

The Wolf Lake area has a long history of mineral exploration and mining. The core of the Wolf Lake old growth red pine forest is coincident with 23 surface and mining rights leasehold patents and numerous mining claims. MNR's decision summary states that "these 21-year leases were issued in 1991 and are renewable in 2012" and that "given the long-standing and progressive mineral exploration in the area, it is considered likely that the leases will be renewed." In 2007, MNDM completed a mineral resource assessment of the area and concluded that it has Provincial Significant Mineral Potential.

Summary of Issues:

In January 2008, two applicants requested that MNR review the need to regulate the Wolf Lake Old Growth Forest Reserve as a protected area under the *PPCRA* or find comparable contiguous area of red pine old growth in the immediate area. The applicants stated that the site's "international significance as the largest contiguous red pine old growth – arguably in the world – dictates that the province must do everything in its power to remove the threat of mining activity from it and regulate it as a protected area."

The applicants believe that a request for a review is in keeping with MNR's Statement of Environmental Values and that without a review, "ecologically significant lands that were supposed to be withdrawn from industrial development may be open to logging and mining, resulting in 'potential for harm to the environment'." Moreover, the applicants believe that while the owner of the mining leases in Wolf Lake Old Growth Forest Reserve has conducted extensive drilling in a few isolated areas, "there has been no evidence presented to indicate significant mineral potential."

The ECO sent the application to both MNR and MNDM.

Ministry Response

Ministry of Natural Resources:

On April 10, 2008, MNR denied the application for review. MNR stated that the public interest does not warrant a review for the following reasons.

MNR already plans to seek potential replacement lands for protection:

MNR's proposal to remove the forest reserve designation from Wolf Lake Old Growth Forest Reserve includes the seeking of a replacement area for protection. MNR stated that in examining potential replacement lands, it will consider five ecological criteria: ecological representation, condition, diversity, ecological functions and special features. Furthermore, MNR stated that it will consider "adjacent areas that may have contiguous old growth red pine" and take into account Provincially Significant Mineral Potential and existing mining lands. The ministry also indicated that no final decisions regarding replacement lands will be made until there is a broad public and Aboriginal consultation opportunity.

MNR's May 2005 information notice indicated that land use planning for the Wolf Lake site will include a proposal notice on the Environmental Registry for review and comment, and other opportunities for local review.

MNR recognizes the old growth value of the site and will instill appropriate conservation measures accordingly:

MNR stated that although it has not yet determined what the land use designation (or associated permitted uses) will be for the Wolf Lake lands once the forest reserve designation is removed, irrespective of the land use designation given, MNR recognizes the old growth values of the area and will incorporate appropriate conservation measures. These measures will be guided by MNR's various policy and procedural documents, such as the Crown Land Use Policy Atlas and MNR's *Environmental Assessment Act* coverage for Crown land management.

In response to the applicants' concern that the site may be opened to logging, MNR stated that forest harvesting would only occur on this site if the Crown Land Use Policy Atlas is amended, the forest reserve designation is replaced with one that allows timber harvesting, and the planned forest harvesting is part of an approved forest management plan subject to public and Aboriginal consultation.

MNR believes there is no potential for harm to the environment if this application is not reviewed since:

- MNR applies several policy and procedural documents when implementing provincial legislation to direct resource management and land uses;
- the allocation, management and disposition of Crown land and resources administered by MNR through legislation are subject to a variety of processes and requirements under the Environmental Assessment Act, and
- MNR intends to incorporate appropriate conservation measures to protect the old growth values
 of the Wolf Lake site.

In its response, MNR mentioned that in 2007, MNDM completed a mineral resource assessment, which concluded that the reserve area has Provincially Significant Mineral Potential. Moreover, MNR stated that "[g]iven the long-standing and progressive mineral exploration in the area, it is considered likely that the leases will be renewed."

Ministry of Northern Development and Mining:

On June 13, 2008, MNDM denied the application for review. Although MNDM believes that the applicants' request that Wolf Lake Old Growth Forest Reserve be regulated as a protected area does not fall under its mandate, the ministry addressed specific matters relating to mining as part of its response.

MNDM believes that "the applicants' view that ecologically significant lands will be subject to environmental harm due to mineral exploration in a few isolated areas of the Reserve is inaccurate." MNDM reasoned that the *Mining Act*, other provincial permitting requirements and federal and provincial environmental protection measures ensure that mineral exploration and development occurs in a manner to mitigate and eliminate the effects of mining on the environment. The ministry argued that mining is a temporary land use, and mining regulations ensure that a mine site is subsequently rehabilitated to natural, recreational, or commercial land uses.

Furthermore, MNDM argued that because in most instances, prospecting and staking rarely proceed to advanced exploration and mine development, it is premature to conclude that preliminary exploration in the Wolf Lake area will lead to the discovery of commercial grade minerals or ores and thus advanced mineral exploration.

Other Information

Neither MNR nor MNDM explained to the applicants whether current provincial laws and policies preclude the Ontario government from cancelling leases and claims within the reserve and regulating the land under the *PPCRA*.

While lands under expired mining claims can be withdrawn from staking and regulated as a protected area, MNR policy directs that "once a staked claim proceeds to lease, the only option to regain the lands for Crown or other public use is through acquisition of the rights of the lessee." Nevertheless, section 179(1) of the *Mining Act* indicates that a mining lease can be withdrawn by MNDM if it is repealed in the Superior Court of Justice.

In November 2008, the ECO contacted MNDM to ask whether there are any provisions in the *Mining Act* that allow the minister to rescind an existing mining lease. In March 2009, MNDM responded that:

There are no provisions under the Mining Act R.S.O. 1990, c. M. 14 (as amended) to rescind an existing mining lease that is in good standing. The Mining Act does provide for the termination of a mining lease for non-payment of rent, or failure to renew the lease in accordance with the requirements of the Act. Once issued, a mining lease may be renewed, but the Minister may refuse to renew if the requirements in subsection 81(8) have not been met.

Subsection 81(8) of the *Mining Act* states that the Minister of Northern Development and Mines shall refuse to renew a lease unless:

- The production of minerals has occurred continuously for more than one year since the issuance or last renewal of the lease; or
- The lessee has demonstrated to the satisfaction of the minister a reasonable effort to bring the property into production.

ECO Comment

MNR's Responsibility:

The ECO disagrees with MNR's decision to deny this application for review. MNR's own public documents state that the Wolf Lake site contains one of the largest, if not the largest, known contiguous red pine old growth forest in North America. Locating lands that are comparable in size and ecological significance may prove extremely difficult or impossible, as indicated by MNR's noncommittal statement that it would seek a replacement area that "may" have contiguous old growth red pine. The ECO believes that MNR should have taken a precautionary approach, assumed that comparable replacement lands will not be found, and considered a solution that will protect this ecologically unique area.

Neither MNR nor MNDM gave any reason why the forest reserve lands cannot be withdrawn and regulated as part of Chiniguchi Provincial Park if the mining claims lapse and leases expire. Rather, the ministries only stated that "[t]he government, led by MNR, continues to look for solutions to minimize potential land use conflicts, and considers existing established land uses when examining candidate protected areas."

Once mining claims lapse in nearby Kukagami Lake Forest Reserve, MNR proposes to withdraw the lands from staking and regulate them as part of Chiniguchi Provincial Park. The ECO notes that MNR could likewise do the same for mining claims in Wolf Lake Old Growth Forest Reserve, all of which are due to expire by March 2010. With regard to the 23 mining leases within the reserve, while MNR states that they are not renewable until 2012, the ECO notes that 13 of these leases actually expire in October 2010. And while MNR considers it likely that the leases will be renewed when they expire, the ECO believes that if there is a possibility that the leases will lapse, MNR should take advantage of the opportunity to incorporate the lands into Chiniguchi Provincial Park as originally intended in the OLL. Alternatively, if the leaseholder does not let the leases lapse, the ECO believes that MNDM should offer

reasonable settlement to the individual holding a conflicting claim or lease so that MNR can withdraw the lands and regulate them under the *PPCRA*. Whatever the case, the ECO believes that MNR should have reviewed this application in order to identify potential solutions to protect these potentially irreplaceable lands.

MNDM's Responsibility:

The ECO believes that MNDM's decision to deny this review is reasonable given that the request to regulate the forest reserve under the *PPCRA* falls outside its mandate.

The ECO notes one point of confusion between MNDM's and MNR's responses. MNDM argued that because mineral staking rarely advances to exploration and mine development, the applicants' concerns of ecological harm are premature. Yet, MNR mentioned that the Wolf Lake area has Provincially Significant Mineral Potential and that mining leases in the area will likely be renewed, giving the contradicting impression that development, and therefore potentially ecological impacts (such as significant forest removal), will likely occur.

Review of Applications R2007027, R2007028 and R2007029:

Regulatory and Policy Reform Related to Methylmercury in Ontario's Boreal Forest (Reviews Denied by MOE, MNR and MNDM)

This application was reviewed in conjunction with R2007027 (MOE) and R2007029 (MNDM). Please see the Ministry of the Environment portion of this section for the full review.

Review of Application R2008001:

5.4.3 Review of the *Aggregate Resources Act* (Review Denied by MNR)

Background/Summary of Issues

In April 2008, an *EBR* application was submitted that requested a review of the *Aggregate Resources Act* (*ARA*). The applicants were concerned that there is no mandatory requirement for the consideration of cumulative social and environmental impacts when the Ministry of Natural Resources (MNR) is considering approvals for pits and quarries; these activities tend to be clustered due to the underlying geologic formations. The applicants asserted that the regional impact of existing pits and quarries should be assessed when MNR is considering the approval of any new operations; specifically, they raised concerns with new pits and quarries near Thamesford in southwestern Ontario. The ECO forwarded this *EBR* application to MNR.

Ministry Response

In July 2008, MNR denied this *EBR* application. The ministry provided an extensive response to the applicants to explain why the public interest did not warrant a review. MNR stated that there already are mechanisms to consider cumulative impacts by means of the *Planning Act*, the 2005 Provincial Policy Statement (PPS), and the local municipal official planning process.

MNR noted that the applicants did not specify the exact nature of their concerns related to cumulative impacts (e.g., noise, aesthetics, traffic, water quantity and quality, natural heritage impacts, etc.). However, the ministry stated that "any cumulative assessment mechanism needs to be sufficiently broad

to consider all land uses (not limited to aggregate extraction operations)." MNR illustrated its position by noting that a new residential subdivision being constructed in Thamesford will also have a variety of impacts. In its response to the applicants, the ministry stated:

Some may view these impacts positively, as a consequence of expanding growth of the community, while others may view these impacts negatively, as a change to the rural character of the community. It becomes a basic societal question, which is more appropriately addressed from a broad land use planning.

The ministry stated that "cumulative impacts may be considered" in assessing the hydrogeological effects of new aggregate operations licensed under the *ARA*. MNR also stated that the *ARA* and its regulations are matters of "on-going review" internally within the ministry and, therefore, they did not warrant additional review. Moreover, the ministry stated that a review of the regulatory framework for aggregates as requested by the applicants "is not the appropriate process to consider cumulative impacts."

ECO Comment

The ECO disagrees with MNR's decision to not conduct a review. The ministry's rationale was largely based on the assumption that cumulative impacts are appropriately and effectively assessed through the municipal official planning process, guided by the *Planning Act* and the 2005 PPS. The 2005 PPS provides policy direction on matters of provincial interest, reflecting the Ontario government's stated priorities for the establishment of such land uses as aggregate operations. However, it does not contain any reference to cumulative impacts or their consideration in decision-making. The ECO previously has commented that this land use planning system is weighted in favour of extractive and destructive uses of the land. This system often is deterministic in nature and does not include an *a priori* discussion of the need for any given project.

Municipalities have little practical ability to restrict the approval of new pits and quarries under the existing land use planning system. They also are often reluctant to restrict new operations because of the costly possibility of facing an Ontario Municipal Board hearing. This skewed process often results in frustrated local residents feeling disenfranchised by both their local politicians and the provincial government.

MNR should develop a regionally-based planning approach involving the assessment of cumulative impacts, when considering an individual approval for a new or expanded operation. Such an approach is logical because geologic formations naturally cluster favourable locations for pits and quarries. This same clustering effect also is driven by provincial land use planning direction which explicitly encourages that aggregate be made available close to markets. As a result, land use conflicts are almost assured as some of the highest quality aggregate deposits are found in the areas of the greatest ecological and social significance in southern Ontario.

The broader land use planning process under the *Planning Act* should notionally consider cumulative impacts as part of its decision-making process. However, MNR also has an obligation to ensure that its own regulatory framework – the approvals over which it has authority – explicitly considers the combined effects of various land uses. MNR's approval processes are intended to be the fine filters for site-specific land use decisions and they often are the appropriate time to consider detailed technical information. Broader societal choices about land uses, as laid out in a municipal official plan's system of zoning, should not be construed as a thorough assessment of the ecological and hydrogeological cumulative impacts of a particular project.

MNR historically has not considered its Statement of Environmental Values (SEV) in making decisions about instruments, such as permits under the *ARA* that are prescribed under the *EBR*. Section 10 of the *EBR* requires each prescribed ministry to consider its SEV when reaching a decision; it contains no exemption for decisions on instruments. This interpretation recently was upheld by the Ontario Divisional Court.

MNR's current SEV was finalized in October 2008. It directs that the ministry will document how its SEV was considered each time a decision is posted on the Environmental Registry. This new SEV does not explicitly acknowledge the need to consider cumulative impacts. However, it does refer to related concepts: "An ecosystem approach to managing our natural resources enables a holistic perspective of social, economic and ecological aspects and provides the context for integrated resource management." The ECO believes that MNR has a commitment to actively consider the need to assess cumulative impacts in its decision-making.

The Ontario Divisional Court ruling of June 18, 2008 indicates that ministries should be considering their SEVs (including concepts such as cumulative effects) not just for broad policies and legislation, but also for site-specific approvals, such as for pits and quarries. The ECO encourages MNR to take this approach with an emphasis on caution and special concern for natural values in the face of limited knowledge and uncertainty.

Review of Application R2008005:

5.4.4 Review of TIPS-MNR and Fish and Wildlife Enforcement Policies (Review Denied by MNR)

Geographic Area: Province-wide Implications

Background/Summary of Issues

In August 2008, two applicants, on behalf of the Ontario Federation of Anglers and Hunters (OFAH), submitted an application to the ECO requesting a review in two parts: first, of policy associated with the contravention reporting line "TIPS-MNR"; and second, of fish and wildlife enforcement policy in general, both of which are under administration of the Ministry of Natural Resources (MNR).

The OFAH alleged that they received repeated calls from residents concerned about the lack of response to TIPS-MNR calls and that at least three of the calls pertained to illegal fishing in sanctuaries. The OFAH also alleged that when they reported "a serious violation involving the sale of illegal invasive species over the internet," enforcement officers said they were "too busy" to act on the tip.

The OFAH included a copy of a letter that MNR's Information Access Section sent to the OFAH in June 2008, as evidence in support of the application for review submitted to the ECO. The letter was in response to a Freedom of Information request filed by the OFAH under the *Freedom of Information and Protection of Privacy Act*. OFAH's request pertained to the TIPS-MNR line and MNR summarized it as follows:

- Number of calls to TIPS-MNR line since inception, fishing related/hunting related;
- Response time to calls;
- Means of response;
- Number responded to by call;
- Number responded to by conservation officer (CO) visit; and
- Number of charges laid as a result.

In the letter, MNR responded with information from its database in a form "as accurate as the database can provide." The data included the number of occurrence reports received through the TIPS-MNR line and through the field offices; how the reports were assigned (e.g., conservation officer); the status of CO-assigned responses (e.g., open, closed); and closed CO-assigned responses broken down by program (e.g., fish, wildlife). Program information was provided with the disclaimer that "this field is not mandatory

and may reflect what was originally reported by the caller but may have proven otherwise upon investigation." The data indicated that between September 27, 2005 and May 27, 2008, there were 10,536 total TIPS-MNR occurrence reports, 7,272 of them by phone, with 9,416 assigned to COs for appropriate action of which 8,279 were closed responses.

With regard to the remaining information requested by OFAH (i.e., response time, means of response, number of charges), MNR stated that "the record does not exist" and to collect this data "would require in excess of 700 hours of search time and this would substantially interfere with the operations of the program area." MNR concluded its letter with details on how to review or appeal the response to the information and privacy commissioner.

According to the OFAH, the data collected in support of the TIPS-MNR line doesn't allow MNR to answer basic questions about the disposition of cases, or to provide for accountability or performance assessment. The OFAH emphasized the importance of responding quickly to reports if contraveners are to be caught, and of maintaining public confidence that money is being well spent and that natural resources are being protected. The OFAH stated that a review is necessary to assure the public that TIPS-MNR is functioning as intended.

The OFAH expressed concern regarding MNR's overall ability to fulfil its mandate in view of previously identified shortcomings in the ministry's enforcement capacity, including those contained in the ECO's April 2007 Special Report, "Doing Less with Less." The OFAH strongly suggested a review of MNR's overall enforcement capabilities. In the opinion of the OFAH, "it is clear that enforcement is still under funded [sic] and understaffed."

Background:

Establishment of the TIPS-MNR Program

An MNR guide from 2005 states that the TIPS-MNR program was instituted on September 27, 2005 to provide a service to complement "Crime Stoppers" for members of the public who wish to report directly to MNR and do not want to remain anonymous or receive a reward (to report an alleged contravention anonymously, the public can continue to call Crime Stoppers at 1-800-222-TIPS (8477)). The ministry made TIPS-MNR readily available, with a toll free number that is active all day, any day of the year, staffed by MNR personnel.

MNR's website contains a news release issued in September 2006 that reports a "tremendous response" during the first year of TIPS-MNR, with more than 5,000 potential contraventions called in, 71 per cent of them fish and wildlife, leading to 1,410 investigations and 86 convictions. The "TIPS Results" link exemplifies program success with details of the tip, contravention and fine for 15 cases brought before the courts between July 2006 and April 2008. Fines for these cases totaled in excess of \$50,000.

In its "Report a Violation" link, MNR advises that although TIPS-MNR provides valuable and appreciated information, it is not an emergency response line and TIPS-MNR makes no commitment as to how quickly a CO will respond. MNR adds that "the intelligence and field operations sections of the [m]inistry's Enforcement Branch use all of the information collected to focus Conservation Officer efforts on areas where there are high numbers of reports even where the individual reports themselves do not result in immediate on-scene attendance by an officer."

2007 Program Audit Reveals Enforcement Problems

An audit of MNR's fish and wildlife program published in the 2007 Annual Report of the Office of the Auditor General of Ontario ("the audit") revealed that reductions in CO staff numbers and patrol hours have left gaps in enforcement coverage. COs patrolled an average of more than 5,000 square kilometres per officer during the 2006/2007 fiscal year and funding limited them to an average of one or two patrol days a week. This is down from the three or four days a week in the previous fiscal year. About 75 per cent of CO field work is fish and wildlife related. The audit indicated that funding constraints prevented COs from patrolling the final 10 days of a deer hunting season and two-thirds of a lake that supported major sport and commercial fishing.

In its overall response to the audit, MNR explained that funding is focused "on high-priority areas" identified using "risk-based analysis and a landscape or ecosystem approach to managing resources" consistent with the ministry's strategic directions to "place greater priority on protecting biodiversity and habitat." According to the audit, the fish and wildlife program adopted a risk-based compliance and enforcement framework in April 2006. The audit shows, however, that funding was not consistent with the risk-based plan. CO patrol hours during the 2006/2007 fiscal year were between 15 per cent and 60 per cent less than the hours indicated by the plan as "necessary to effectively protect natural resources."

The audit also addressed the effect of budgetary constraints on TIPS-MNR. Though almost 20 per cent of TIPS-MNR calls occur in the evening, few CO shifts extend past six o'clock. COs require supervisory approval for overtime work to ensure that extra costs are balanced with severity of the complaint and staff safety. Ministry staff informed the auditors, however, that immediate assistance is not required for most night-time complaints.

ECO Special Report:

In our April 2007 Special Report, "Doing Less with Less," the ECO raised troubling concerns about the adequacy of current enforcement by MNR and reiterated concerns expressed by stakeholder groups like the OFAH, the media and MPPs in the Legislature about inadequate MNR controls on poaching. According to the report, despite the increasing complexity and geographic range of CO responsibilities, field enforcement staff numbers have been reduced by roughly 20 per cent since 1993 and cuts in the number of patrol vehicles have left COs increasingly desk-bound. The report shows CO reductions between 2004/2005 and 2005/2006 coincided with a seven per cent drop in contacts with anglers and hunters, an 11 per cent drop in charges laid and a 19 per cent drop in convictions.

The ECO's 2007/2008 Annual Report examined risk-based approaches to compliance and enforcement as part of its review of fisheries protocol decisions. The ECO expressed concern regarding the increasing application of risk assessment and urged ministries involved to assess risk using landscape-scale plans that reflect broad-based ecosystem functions and consider potential cumulative impacts.

Ministry Response

MNR acknowledged the application within the required time, but provided its response in January 2009, 55 days after the date required by the *Environmental Bill of Rights* (*EBR*), without informing the OFAH or the ECO of the delay.

MNR decided that public interest did not warrant a review of the matters raised in the application. The ministry declined the enforcement part of the requested review because "enforcement capabilities relate to provincial and internal [m]inistry budget processes which are not policies, Acts, regulations or instruments."

In addressing TIPS-MNR, the ministry stated that the reporting line is an information tool that supplements MNR's regular enforcement operations and "does not manage the environment or resources". It allows the public to contact MNR, but also allows COs to contact callers during an investigation. The ministry explained that response to TIPS-MNR varies depending on the quality of the information provided and the circumstances, such as potential impact of the contravention; prospects of finding the contravener or contravention; and staff availability. MNR referred to public information that states the ministry will not physically attend the scene of every contravention reported.

MNR further explained that reports received through TIPS-MNR are, in many cases, addressed during other enforcement activities and results are stored "elsewhere." The ministry stated that duplicating this information for the TIPS-MNR database would not benefit the environment and would in fact reduce the officer's time in the field. MNR also stated that because TIPS-MNR response times are not guaranteed, they are not tracked directly. MNR added that the intent of the TIPS-MNR line was to relay complaint information to local offices, not to track and link responses to employee activities or contraventions. In light of these facts, the ministry determined that a review was not warranted.

In MNR's opinion, its decision is consistent with the intent of its SEV considering that TIPS-MNR is "solely" a supplementary information tool. The ministry also stated that there was no potential harm to the environment if the review was not undertaken, and added that with TIPS-MNR, "there has been a potential improvement in protection to the environment through the timely receipt of information." To conclude its review decision, MNR provided contact information so the OFAH could meet with ministry staff to discuss their concerns.

ECO Comment

The ECO did not find MNR's rationale for declining this review to be convincing. Enforcement programs are ministry policies as defined in the *EBR* and are therefore subject to applications for review (see box). Similarly, deeming a program or policy to be "supplementary" (as MNR did in this case) does not exempt it from *EBR* review.

The ECO realizes that under a risk-based plan, some TIPS-MNR calls won't be responded to because the alleged contravention did not occur in a high-risk area. However, the applicants also alleged that the ministry did not respond to a case of on-line sale of invasive species, which is disturbing. The introduction of invasive species is a broad-scale issue that threatens biodiversity. Similarly, there is a concern about inadequate night-time enforcement, as suggested by the 2007 audit by the Auditor General. The 2007 reports from the ECO and Auditor General identified other circumstances where funding shortages may have compromised enforcement responses. The ECO encourages MNR to ensure adequate funding for enforcement programs.

TIPS-MNR appears to be a useful tool that has produced some impressive results, since it has led to over a thousand investigations and a number of convictions. TIPS-MNR benefits extend beyond enforcement activities; the program also improves public awareness and increases support for ministry activities. Nevertheless, the applicants raised some valid concerns about the program, and their concern is an indication of how strongly the Ontario public cares about the protection of our fish and wildlife resources. Had MNR undertaken this review, the ministry could have addressed the concerns directly, and could also have improved public understanding of the need for discretion in handling TIPS-MNR information. The ECO was pleased that MNR at least offered to meet with the applicants to discuss their concerns. MNR should have completed its review decision by the due date, however, and the absence of a letter forewarning of the delay was unfortunate.

The ECO encourages MNR to maintain and strengthen public confidence in TIPS-MNR by regularly publishing transparent, up-to-date summary data on the numbers and types of tips received, a general break-down of how tips were responded to, and overall program outcomes.

Are enforcement programs subject to applications for review?

As part of its decision to deny this application, MNR argued that "enforcement capabilities relate to provincial and internal [m]inistry budget processes which are not policies, Acts, regulations or instruments."

The ECO disagrees with this interpretation. While the *EBR* does exempt budget-related or predominantly administrative or financial proposals from being posted on the Registry (Sections 15 and 33), there is no such exemption for applications for review under the *EBR* (section 61-73). Further, there are no express restrictions on the ability of the ECO to review ministry budgetary processes. Under section 58(2)(e) the Commissioner shall include in his report any information he or she considers appropriate. The *EBR* defines policy broadly as "a program, plan or objective and includes guidelines or criteria to be used in making decisions about the issuance, amendment or revocation of instruments but does not include an Act, a regulation or an instrument."

The ECO maintains that enforcement and compliance capabilities are indeed ministry policies as defined in the *EBR* and are subject to applications for review. Enforcement is also essential to the effective implementation of legislation such as the *Fish and Wildlife Conservation Act*. There have

been a number of past reviews under the *EBR* that have addressed MNR enforcement and staffing issues. Recent examples include the role of aggregate inspector workloads in the rehabilitation rates of pits and quarries (2006/2007 Annual Report) and MNR's compliance system for the Ontario forest industry (2003/2004 Annual Report).

Review of Application R2008006:

5.4.5 Review of the Need for a Management Plan for Ryerson Township Forest Conservation Reserve (Review Denied by MNR)

Background/Summary of Issues

In October 2008, the applicants filed an application for review concerning the management of Ryerson Township Forest Conservation Reserve. The applicants had become aware that the Ministry of Natural Resources (MNR) was considering the construction of a snowmobile trail through this protected area. The applicants believed that the ministry was allowing this project to proceed based on a misinterpretation of policy by MNR staff. They asserted that the existing management direction for this site should be upgraded to more thoroughly deal with this issue and to better reflect the *Provincial Parks and Conservation Reserves Act, 2006 (PPCRA)*. More generally, the applicants also asserted that the law does not explicitly require MNR to adhere to management direction nor to soundly implement it in protected areas. The ECO forwarded this application to MNR.

The ECO also forwarded this application to the Ministry of the Environment (MOE) for information purposes only; the applicants raised issues that involved MNR's use of the Class Environmental Assessment (EA) for Provincial Parks and Conservation Reserves ("parks class EA"). MOE has overall responsibility for the *Environmental Assessment Act* and MNR must comply with this legislation in applying any class environmental assessments.

The applicants concurrently filed a second application for review that raised similar concerns, but illustrated the problem as a systemic issue that necessitated amendments to the *PPCRA* (see the review of R2008007, also in this section of the Supplement). The applicants were concerned that management direction for protected areas, although mandatory, may inadequately reflect the law's principles and objectives for planning and management that centre on maintaining ecological integrity. Moreover, they also were concerned that MNR may not properly implement approved management direction. The ECO forwarded this second application to MNR.

Management Direction for Ryerson Township Forest Conservation Reserve:

Ryerson Township Forest Conservation Reserve is a protected area covering 353 hectares in two separate blocks of land near Parry Sound. It was regulated in May 2002 and does not contain any permanent facilities. This conservation reserve is mostly surrounded by privately-owned land and contains one of the few mature hardwood forests in the area.

This protected area contains 276 species of flora, including a number of plants that are provincially rare. It also serves as an important wintering feeding area for both white-tailed deer (*Odocoileus virginianus*) and moose (*Alces alces*). This protected area is frequented by eastern wolves (*Canis lycaon*), a regulated species of special concern under the *Endangered Species Act, 2007*, and also features a nesting colony of great blue heron (*Ardea herodias*). No cultural inventories have been undertaken for Ryerson Township Forest Conservation Reserve, but there is some evidence of a 19th century settlement based on a site inventory initiated by MNR in 2002.

The *PPCRA* directs that the "maintenance of ecological integrity shall be the first priority" in all aspects of the planning and management of Ontario's protected areas. The law defines ecological integrity as "a condition in which biotic and abiotic components of ecosystems and the composition and abundance of native species and biological communities are characteristic of their natural regions and rates of change and ecosystem processes are unimpeded." Ecological integrity encompasses healthy populations of native species, including species at risk, as well as air and water quality consistent with the protection of biodiversity and recreational enjoyment.

Management direction is mandatory for all protected areas under the *PPCRA*. These area-specific policies can take two forms: (1) a brief management statement that addresses a limited number of non-complex issues; or (2) a detailed management plan that addresses substantial and complex issues. Generally, conservation reserves have a management statement (formerly referred to as a statement of conservation interest) and provincial parks have a management plan. The three legal objectives for managing conservation reserves are:

- 1) to permanently protect representative ecosystems, biodiversity and provincially significant elements of Ontario's natural and cultural heritage and to manage these areas to ensure that ecological integrity is maintained;
- 2) to provide opportunities for ecologically sustainable land uses, including traditional outdoor heritage activities and associated economic benefits; and,
- 3) to facilitate scientific research and to provide points of reference to support monitoring of ecological change on the broader landscape.

Ryerson Township Forest Conservation Reserve has a management statement that was approved in March 2003 and amended in March 2007. The general public was not consulted when MNR developed or amended this management direction. In fact, the ministry has consistently failed to meet its obligation to consult the public as required by the *Environmental Bill of Rights, 1993 (EBR)* for almost every conservation reserve in the province (see pages 41-47 of the ECO's 2003/2004 Annual Report). One consequence of limiting public participation is that a finalized policy may lack sufficient or appropriate content.

The applicants asserted that the existing planning direction for Ryerson Township Forest Conservation Reserve was inadequate. Their central concern was that MNR had proposed to allow the construction of a new snowmobile trail, also likely to be used by all-terrain vehicles (ATVs), which would cause serious ecological impacts. The applicants noted that the *PPCRA* specifically directs that the "maintenance of ecological integrity shall be the first priority" in all aspects of the planning and management of Ontario's protected areas. They asserted that the involved issues were "complex" and would be better addressed through the development and public consultation on a new management plan for the site.

The applicants stated that the construction of a new snowmobile trail would impair the ecological integrity of Ryerson Township Forest Conservation Reserve. Moreover, they stated that the harmful ecological impacts of motor-vehicle use in protected areas are well-documented. The applicants stated that the parks class EA process, in reaching the conclusion to issue a work permit, failed to meaningfully consider the ecological integrity of the site. They also stated that the parks class EA process failed to consider the impacts of the actual use of the trail by snowmobiles; instead, this process only focused on the construction of the trail. The applicants stated:

The construction of a new snowmobile trail raised numerous issues, including: increased monitoring and enforcement; added administrative costs; habitat destruction and fragmentation; noise and air pollution; soil compaction; disruption of wildlife movement corridors; and introduction of invasive species. In light of these reasons, the potential construction of a new recreational motor-vehicle trail, and the management of its subsequent use, invokes a substantial number of highly complex issues.

The applicants stated that the lack of MNR enforcement capacity to monitor such sites makes it practically impossible to ensure that the proposed trail would not be used year-round by ATVs. They stated that previous attempts by MNR to block trails for ATV users from restricted areas in other local conservation reserves have proven unsuccessful. Moreover, the applicants cited the ECO's 2003/2004 Annual Report which reported that the majority of non-operating protected areas (such as this one) are visited once a year, if at all, by ministry staff.

The management statement for this site states that "the biophysical attributes of the conservation reserve lend themselves to nature – related activities such as bird-watching, hiking, cross-country skiing and snowshoeing, but there is little evidence that the area is significantly used for these activities." Two snowmobile trails currently exist in the conservation reserve; one trail is along the boundary of the larger block of land and the other crosses the smaller block.

The management statement directs that the two existing authorized recreational trails may be permitted to continue. However, it directs that MNR staff will monitor the site to ensure that the conservation reserve will not be adversely impacted. The management statement directs that the construction of new trails will only be considered under "exceptional circumstances" if these tests have been met:

- there is a community need for the trail, as well as community support;
- there are no alternative suitable locations outside of the conservation reserve;
- the trail location would be acceptable and suitable for four-season use; and
- the trail would meet the requirements applicable to all trails, as identified in the preceding paragraph.

The management statement is silent on whether the assessment of any new activities, such as the construction or use of a new trail, should be consistent with maintaining the ecological integrity of the conservation reserve.

MNR's Class EA Process for the Proposed Permit to Construct a Snowmobile Trail: In January 2007, the Magnetawan Ridge Runners Snowmobile Club applied to MNR for a work permit to construct a snowmobile trail through the northern end of Ryerson Township Forest Conservation Reserve. MNR initially considered the permit under section 14 of the Public Lands Act and, subsequently, under O. Reg. 345/07 (Work Permits) after the PPCRA came into force in September 2007. The rationale for this project was that a private land-owner living north of the conservation reserve purportedly asked the snowmobile club to relocate an existing trail as it was a perceived safety hazard in crossing his driveway.

MNR assessed the issuance of this permit as a Category B project under its parks class EA. In May 2008, the ministry solicited public comment on the proposed permit. Members of the public raised a variety of concerns including issues involving air quality, noise, ATV access, impact on the deer yard, impact on cultural heritage at the site, lack of current and future monitoring and enforcement by MNR staff, lack of an environmental impact assessment report, and that exceptional circumstances did not exist to justify the creation of the trail.

The district biologist at MNR initially recommended the refusal of the application for a permit as the proposed trail would be routed through a deer yard, thereby causing significant ecological impacts. Another expert, who previously had compiled the life science inventory for MNR for this site in 2002, commented:

The Ryerson Township Forest has been identified as having a high potential for cultural heritage site.... [it] constitutes an archaeological site under the definitions of the *Ontario Heritage Act....* This portion of C98 [Ryerson Township Forest Conservation Reserve] is a recognized deer yard.... To allow more development in C98, under these circumstances, is inconsistent with the Statement of Conservation Interest.

Based on its assessment, the ministry stated that the "potential impacts identified in the screening process range from low negative to low positive. MNR also stated that the potential impacts to earth or life science features, as well as to terrestrial wildlife, were rated as unknown. The only explicit reference to the potential impacts on the ecological integrity of the conservation reserve was a line item in the ministry's screening criteria check-list that was marked as having a low negative net effect.

MNR rated the potential impacts on cultural heritage as "nil". The ministry stated that it applied the Cultural Heritage Resources Technical Guidelines as part of the parks class EA process. MNR also stated that the Ministry of Culture was unaware of any cultural heritage resources at the site. As part of this aspect of screening, the ministry stated that the proposed trail would have a low positive effect as it "supports snowmobile tourism."

MNR stated the work permit should be issued as an "extenuating circumstance" existed due to the "unsafe" nature of the existing trail that was outside of the conservation reserve. The ministry also stated that all its criteria were met in order to issue a permit. Moreover, MNR stated that the "grounds for refusal... do not exist" under O. Reg. 345/07 and that the ministry is "obligated to issue a work permit."

O. Reg. 345/07 states that a "...conservation reserve manager shall issue a work permit... to any person who applies for the permit." However, the regulation does direct that the application for a permit can be refused on multiple grounds; for example, it can be refused if the proposed activity would be contrary to the law, inconsistent with management direction, or it would pose a threat to elements of the natural environment such as wildlife.

Order under the Environmental Assessment Act Issued by MOE to MNR:

Prior to submitting this *EBR* application, the applicants filed a bump-up request with MOE in May 2008. The applicants had asked that MOE require MNR to carry out a Category C assessment of the proposed snowmobile trail under its parks class EA, rather than a Category B assessment. Category C projects are undertaken when there is the potential for medium to high net negative effects and/or public agency concern; unlike a Category B assessment, it also requires that an environmental study report be completed.

In response to the bump-up request, the Minister of the Environment issued an Order, under section 16(3) of the *EAA*, to MNR in September 2008 with the following requirements:

- 1) The MNR shall re-evaluate the alternatives and must include the preferred alternative. The MNR's weighting of the criteria, as well as the decision-making process followed must be explained, along with the reasons for using the criteria to identify and assess the alternatives;
- The MNR shall revisit the assessment of potential impacts to the Ecological Integrity of the Conservation Reserve and the potential impacts of the intended use of the trail (snowmobile traffic) on terrestrial habitat linkages or corridors;
- 3) The MNR shall clearly define and describe the local characteristics and existing environment of the study area of the Project;
- 4) The MNR shall evaluate the potential impacts resulting from ATV use and provide a clear and traceable rationale for the MNR's decision on the implementation of monitoring for ATV use;
- 5) The MNR shall revise the Project file to document the evaluation of requirements 1 through 4 in a systematic and traceable manner;
- 6) The MNR shall consult with the interested or directly affected public, including the Part II Order requesters for the Project;

- 7) The MNR shall re-issue a Notice of Completion to make the revised Project file available for public review and comment and offer another opportunity to provide comments or request a Part II Order if the concerns have not been addressed by the further work required on this Project; and
- 8) The MNR shall not proceed with the Project, until requirements 1 through 7 outlined above, are fulfilled.

In February 2009, MNR informed the ECO that it had decided to not proceed with this project. The ministry stated that should the snowmobile club wish to proceed with this project in the future, it would be MNR's intent to comply with the Order issued by MOE.

Ministry Response

In November 2008, MNR denied this application as it determined that the public interest did not warrant a review of the management direction of Ryerson Township Forest Conservation Reserve. The ministry stated that "adequate protection for the environment" already exists through its application of the *PPCA* and its parks class EA. MNR asserted that the potential for environmental harm was "nil or negligible" as the existing regulatory framework was sufficient to address such concerns:

As directed by the PPCRA, maintenance of ecological integrity is one of the objectives in establishing and maintaining provincial parks and conservation reserves and one of the principles that guide management decisions for all protected areas, regardless of the type of management direction in place. Therefore, the question of maintaining ecological integrity in and of itself cannot establish the planning complexity of a protected area.

MNR stated that a management statement, in contrast to a management plan, was sufficient for this protected area as any of its planning issues were "non-complex." Moreover, the ministry stated that its parks class EA applies whether a protected area is governed by a management statement or a management plan. MNR also stated that the management direction for the site is already required to be periodically evaluated.

The *PPCRA* also requires that the ministry prepare and make public a new planning manual for protected areas by September 2009. The current overarching planning policy was originally introduced in 1978 and later amended in 1992; it does not reflect the new law. MNR stated that this manual will "incorporate current practice into express guidance for determining the appropriate management direction type (i.e. plan or statement) for a protected area planning project." The ministry also stated that this manual will direct any future revisions to the management direction for a particular protected area, including that for Ryerson Township Forest Conservation Reserve.

The ministry stated that it considers its Statement of Environmental Values (SEV) in developing management direction for conservation reserves, in order to "be accountable for ensuring that the environment is considered in any decisions it makes which may affect the environment." Based on this statement, the ECO requested copies of the SEV considerations related to MNR's approval of the management statement in March 2003 and when it was amended in March 2007. MNR only provided a SEV consideration for the 2007 amendment; no SEV consideration was undertaken when the statement was approved in 2003.

ECO Comment

The ECO disagrees with MNR's rationale to not conduct a review. The ministry openly took the position that its own regulation for work permits would not allow them to deny an application; therefore, the ministry was obligated to issue a permit and allow the construction of a snowmobile trail through a protected area. In taking this position, MNR essentially predetermined – and nullified the core purpose – of its class environmental assessment. It is very disconcerting how the ministry interpreted and applied its own regulatory framework in this case. In denying this *EBR* application, MNR failed to address its

central point: that the ministry's management of this protected area inadequately addressed the maintenance of ecological integrity

The *PPCRA* specifically directs that the "maintenance of ecological integrity shall be the first priority" in all aspects of the planning and management of Ontario's protected areas. However, MNR's only specific reference to ecological integrity in its screening of this project was a line item in an appendix. The ECO believes that such screening does not meet any reasonable interpretation of a planning process that makes ecological integrity the first priority. MOE shared a similar concern in issuing an Order under the *Environmental Assessment Act* to MNR on this specific issue. The ECO commends MOE for adequately assessing the applicants' concerns and taking action.

A significant problem is that O. Reg. 345/07 (Work Permits) appears to provide limited discretion to MNR to refuse to issue work permits; the onus is on MNR staff to rationalize why a proposed activity is inappropriate. It does not reflect or reference the fact that the first priority by law is the maintenance of ecological integrity. Instead, regulations under the *PPCRA* should be designed to assume that only approvals that have demonstrated their compatibility with the maintenance of ecological integrity are allowed. The burden of proof should be on why a proposed activity may be appropriate, rather than on having to justify why it is not.

MNR must now prepare and make public a new planning manual for protected areas by September 2009. This detailed policy will direct how management statements and management plans for both provincial parks and conservation reserves are developed. It is imperative that MNR embed the core principles and objectives of the *PPCRA* in that manual. The ECO believes that the new planning manual should guide how the ecological integrity of Ontario's protected areas is maintained and, ideally, restored if necessary. The ECO will review this planning manual in a future Annual Report.

Review of Application R2008007:

5.4.6 Review of the *Provincial Parks and Conservation Reserves Act, 2006* with Respect to Planning and Management Direction (Review Denied by MNR)

Background/Summary of Issues

Ontario has more than 600 protected areas, covering approximately nine per cent of the province's land base. Management direction is mandatory for all protected areas under the *Provincial Parks and Conservation Reserves Act, 2006 (PPCRA)*. These area-specific policies can take two forms: 1) a brief management statement that addresses a limited number of non-complex issues; or, 2) a detailed management plan that addresses substantial and complex issues. Generally, conservation reserves have a management statement (formerly referred to as a statement of conservation interest) and provincial parks have a management plan.

The *PPCRA* directs that the "maintenance of ecological integrity shall be the first priority" in all aspects of the planning and management of Ontario's protected areas. The law defines ecological integrity as "a condition in which biotic and abiotic components of ecosystems and the composition and abundance of native species and biological communities are characteristic of their natural regions and rates of change and ecosystem processes are unimpeded." Ecological integrity encompasses healthy populations of native species, including species at risk, as well as air and water quality consistent with the protection of biodiversity and recreational enjoyment.

In October 2008, the applicants filed an application for review requesting that the Ministry of Natural Resources (MNR) amend the *PPCRA*. The applicants were concerned that the current wording of the *PPCRA* does not ensure that the maintenance of ecological integrity is adequately reflected in the

required management directions and how these directions are implemented by MNR. The applicants requested that the law be amended to explicitly require that management direction and its implementation be in accordance with the Act's objectives, and planning and management principles. They also requested that all management direction that is not in accordance with the Act's objectives and principles be reviewed within one year by MNR. The ECO forwarded this application to MNR.

The applicants concurrently filed a second application for review (see R2008006, also in this section), which illustrated a site-specific example of the concerns raised by this particular application. This second application requested that MNR develop a management plan for Ryerson Township Forest Conservation Reserve to replace the existing management statement. The applicants were concerned that the ministry was considering the issuance of a work permit to construct a new snowmobile trail though this conservation reserve, due to a perceived misinterpretation of policy and lack of sufficient direction in the existing management statement for this protected area.

Ministry Response

In November 2008, MNR denied this application for review. The ministry stated that public interest does not warrant a review as the *PPCRA* was enacted within the last five years; it was given Royal Assent in June 2006, and proclaimed in September 2007. MNR stated that the applicants did not present any evidence that was not already considered during the public consultation process to develop this legislation. Moreover, the ministry stated that no evidence was presented by the applicants to suggest that a failure to undertake the review could result in significant harm to the environment. MNR did not address any of the main issues raised by the applicants.

ECO Comment

The ECO disagrees with MNR's rationale to not conduct a review of the need to amend the *PPCRA*. The applicants raised valid concerns about the ambiguity in the Act – both perceived and real – with respect to how MNR should develop and apply management direction for protected areas. The applicants' request is sound: they are asking that plans properly reflect the law and that the government follow its own plans.

In the past, numerous experts raised similar criticisms of the old *Provincial Parks Act.* While the new *PPRA* remedied some long-standing planning deficiencies, such as making the preparation of management direction mandatory, it does not address how management plans or statements must be adhered to by MNR.

The Ontario government has established other planning regimes that explicitly direct that ministers, ministry officials, and other decision-makers exercise their authority consistent with approved plans. For example, the *Planning Act* regulates municipal land use planning and it directs that a decision made by a Minister of the Crown "shall be consistent with" any policy statements issued under that law; they also shall conform with provincial plans or shall not conflict with them, as the case may be. These particular policies and plans are intended to reflect and apply provincial interests as described by the government, very similar to what is intended for protected areas.

For protected areas, the Ontario government has expressed in law that ecological integrity is the first priority in planning and management, and that each area must have a plan. While it is reasonable that Ministers of the Crown be required to adhere to these plans, it is erroneous to assume that the mere existence of a plan ensures adherence to it.

MNR must now develop a new planning manual for protected areas by September 2009. The ministry also must begin a review of its Class Environmental Assessment (EA) for Provincial Parks and Conservation Reserves in the fall of 2009. This policy and class environmental assessment dictate how planning and management decisions are made for protected areas. It is imperative that MNR embed the core principles and objectives of the *PPCRA* in both its new planning manual and a significant revision of its class environmental assessment. The ECO will review both documents in a future Annual Report.

Review of Applications R2008011, R2008012, and R2008013:

Review of all Instruments and Permits Granted to Further the York Durham Sewer System and the Oak Ridges Moraine Conservation Plan (Reviews Denied by MOE and MMAH; Returned by MNR)

This application was reviewed in conjunction with R2008011 (MOE) and R2008013 (MMAH). Please see the Ministry of the Environment portion of this Section for the full review.

5.5 Ministry of Northern Development and Mines

Review of Application R2007020:

5.5.1 Review of the Need for a New Policy under the *Mining Act* (Review Denied by MNDM)

Geographic Area: Province-wide Implications

Background/Summary of Issues

In January 2008, the applicants filed an application for review of the need for a new policy addressing environmentally sustainable practices for prospectors. Mineral development is regulated under the *Mining Act*. The applicants requested a policy that ensures the development of educational materials on the environment and that makes protection of the environment a condition of approval. The applicants explained that although the Ministry of Northern Development and Mines (MNDM) promotes environmental principles for sustainable development in its Statement of Environmental Values (SEV), it fails to give a high priority to environmental protection. The ECO forwarded this application to MNDM.

To substantiate their claim, the applicants provided a link to the "Mining Lands" home page of the MNDM website. According to the applicants, the page offers a "prominently" displayed link to mining and surface rights information consisting of a fact sheet and frequently asked questions. The applicants also listed four MNDM guides and brochures, and one video available on the website. The applicants alleged that the MNDM website references contain no information on protecting the environment or on minimizing environmental disturbance, and that any existing environmental material is provided by industry in a form not readily available to all prospectors. The applicants also alleged that MNDM's information on mining and surface rights does not apply to Crown lands, where the majority of exploration work occurs. Mine hazards information, they claimed, appears to pertain strictly to prospectors, not to landowners. The applicants stressed the importance of education considering that "there is no requirement for training or certifying of prospectors in Ontario."

MNDM's commitments were outlined in the application using quotes from the ministry's SEV. One was MNDM's mission statement, which binds the ministry to environmentally sustainable use of the province's geology and mineral resources. Also quoted were the ministry's designated environmental principles of promoting environmentally sustainable planning, and giving a high priority to environmental protection and minimizing environmental disturbances during all phases of mining.

In concluding the application, the applicants offered recommendations for addressing MNDM's educational shortcomings. They advised the ministry to develop materials that direct prospectors and claim holders to give priority to environmental protection during all phases of mining. They also recommended producing materials that educate landowners on environmental hazards from mining, how to request an inspection and what restrictions apply if they carry out restoration. These educational materials, the applicants added, should be easily available on the Web and, in the case of industry, included in new and renewed prospector's licences and in each confirmation where a claim has been recorded or assessment work filed.

Other Information

By August 2008, there were two additional guides on the MNDM website, one entitled, "A Good Practices Guide for Staking and Exploration When Working With Private Surface Rights Owners" and the other entitled, "A Guide for Private Landowners Working With Ontario's Mineral Exploration Community". Apparently, MNDM recognized that urban expansion was causing a growing need to communicate with private landowners and responded with these guides. The new guides contain no information on protecting the environment or on environmental hazards.

In our 2006/2007 Annual Report, the ECO developed the following formal recommendation, "... that MNDM reform the *Mining Act* to reflect land use priorities of Ontarians today, including ecological values." In reviewing a request for reform of the *Mining Act*, we commented that, "[t]he existing regulatory structure treats public land as freely open to mineral exploration. The consideration of other interests, such as the protection of ecological values, is reactionary, and the question of whether mineral development may be inappropriate is not answered upfront. Instead, it is assumed that mineral development is appropriate almost everywhere and that it is the "best" use of Crown land in almost all circumstances" (see pages 65, 71).

The same Annual Report refers to a review of Canadian mining law in 2004, that concludes it is "virtually impossible" to prohibit mining of a site once exploration has begun. Another review in this Supplement explains how staking may even occur on lands already designated as candidate protected areas to be regulated under the *Provincial Parks and Conservation Reserves Act*, 2006 as a result of conflicts between the *Public Lands Act* and the *Mining Act* (see pages 85-89 of the 2006/2007 Supplement).

The ECO reviewed the "Mineral Development Strategy" that MNDM completed in 2006 and found that although the strategy included an objective to support "environmentally sound exploration and mining," it provided few details on how the environment would be protected. An update in the 2007/2008 Annual Report indicated that MNDM is reviewing the *Mining Act* and that new rules will be in place by 2009. According to MNDM, its review of the legislation will be guided by the goals of the Mineral Development Strategy. Environmental protection was not among the "Elements of the Review" in the discussion paper MNDM released in August 2008 outlining its reform of the *Mining Act*.

Ministry Response

In April 2008, MNDM declined to undertake the review. In support of its decision, the ministry outlined numerous ways in which it addresses environmental protection and landowner safety to meet its SEV and comply with its legislative responsibilities. The ministry listed the various federal and provincial statutes and regulations, and other government permitting requirements, which it stated ensure environmental protection and safety at different stages of the mining sequence. To comply with the requirements, MNDM made a commitment to mitigate short-term effects on the environment, eliminate long-term effects and "protect natural heritage and biological features of provincial significance."

MNDM described additional environmental commitments associated with its Mineral Development Strategy from 2006, which it stated will be achieved through review and possible change of current policy, practices, the *Mining Act* and its regulations. As an example, the ministry described a proposal to address issues of surface rights owners with an amendment to the *Mining Act* and its regulations that would clarify rules for exploration and reduce the impact of mineral exploration on the environment.

Mining Act amendments to reduce "legal barriers to voluntary rehabilitation of abandoned mine hazards by industry" were passed in 2007.

The ministry stated that it provides public information on protecting the environment, minimizing disturbances during exploration, and safety and environmental hazards for landowners at its Northern Development Offices and ServiceOntario Centres. MNDM added that it continually updates its information material, including its website content. The ministry mentioned its website link to landowner and prospector rights. It advised that the website is currently being restructured to improve public access to information and encouraged the applicants to watch for updates. The ministry offered the link to the "gateway website" designed in partnership with key stakeholders and other ministries and central agencies to provide easy access to general information on legislative and approval processes.

MNDM stated that additional safety and environmental information is developed through partners such as the Prospectors and Developers Association of Canada (PDAC) and the Ontario Prospectors Association. The ministry offered the website link for PDAC's "Environmental Excellence in Exploration" (E3) that showcases environmental and social best practices in the minerals industry. According to MNDM, the Ontario Mining Association (OMA) has a policy that requires its members "to mitigate any adverse environmental impacts arising from their activities," and invests over \$85 million each year on environmental improvements.

The ministry emphasized that the mining sequence involves mostly prospecting and staking, activities which are, in the ministry's opinion, of low intensity, causing no or minimal impact on the land. MNDM explained that the discovery of commercially viable deposits is very rare and that even if exploration occurs, the entire sequence through to mine development can take from 10 to 30 years or more. The ministry considers its current efforts at education and protecting the environment to be sufficient.

ECO Comment

The ECO believes that the applicants raised valid concerns. The references MNDM offered do not support the ministry's position – environmental protection information is absent or difficult to find and landowner hazards are not addressed. The ECO considers the applicants' recommendations for raising the priority of environmental protection and landowner safety appropriate. The ministry should feature environmental protection information prominently on its website. Inserting hard copies of environmental protection information in new and renewed licences, claim confirmations, and assessments will ensure that all prospectors and claim holders are informed, including those working on Crown land. With protective measures a condition of approval, prospectors and claim holders will be obligated to act. The ECO encourages the ministry to include restoration plans among the required measures and to attach appropriate enforcement capacity so that potential environmental benefits may be realized.

The lack of environmental protection information on the MNDM website is symptomatic of a much larger problem rooted in the *Mining Act*. The Act, as currently written (January 2009), gives MNDM no mandate to protect the environment. Based on available information, there is no reason to believe that this problem will be resolved through the present review process. The ECO urges MNDM to fulfill commitments in its Mineral Development Strategy and SEV by including strong direction for environmental protection in its current reform of the *Mining Act*.

Review of Applications R2007027, R2007028 and R2007029:

Regulatory and Policy Reform Related to Methylmercury in Ontario's Boreal Forest (Reviews Denied by MOE, MNR and MNDM)

This application was reviewed in conjunction with R2007027 (MOE) and R2007028 (MNR). Please see the Ministry of the Environment portion of this section for the full review.

Review of Application R2007030:

Request to Regulate Wolf Lake Old Growth Forest Reserve (Review Denied by MNR and MNDM)

This application was reviewed in conjunction with R2007023 (MNR). Please see the Ministry of Natural Resources portion of this Section for the full review.

SECTION 6

ECO REVIEWS OF APPLICATIONS FOR INVESTIGATION

SECTION 6: ECO REVIEWS OF APPLICATIONS FOR INVESTIGATION

6.1 Ministry of the Environment

Review of Application I2007008:

6.1.1 Alleged Contravention of the *Environmental Protection Act* (Investigation Undertaken by MOE)

Geographic Area: Windsor

Background/Summary of Issues

In December 2007, an application for investigation was filed by a manufacturing facility. The application alleged that stamping presses from an adjacent facility are causing heavy vibrations that negatively affect the applicants' precision machining operation and employees.

The applicants alleged that the vibrations are contravening section 14 of the *Environmental Protection Act* (*EPA*), which prohibits the discharge of contaminants, including sounds and vibrations that cause or may cause an adverse effect. Under the *EPA*, definitions of "adverse effect" include:

- Interference with the normal conduct of business
- An adverse effect on the health of any person
- Injury or damage to property or to plant or animal life
- Harm or material discomfort to any person

The applicants further alleged that the vibrations are "strong enough to exceed the limits set by the Ministry of the Environment" (MOE) and that the stamping facility has been operating without a Certificate of Approval (C of A). Although MOE is currently reviewing a C of A application submitted by the stamping facility, the applicants requested that an investigation occur before the C of A was issued.

The applicants provided evidence that the vibrations are causing their machines to produce products with inaccuracies and a poor finish quality. The applicants also provided a report that compares vibrations measured throughout the applicants' facility with vibration limits in MOE's Noise Pollution Control document 207 (NPC-207). The report author, an engineering company that specializes in vibrations, found that "many of the measured values, including the average peak vibration levels, exceed the limiting value of 0.30 mm/s." The applicants are concerned about losing customers as well as the long-term effects of the vibrations on their equipment.

Before purchasing the property approximately 27 years ago, the applicants checked that the purchase agreement contained a clause that prohibited the transmission of vibration into the property. However, the applicants were informed in May 2007 by the City of Windsor that when the city's zoning by-law was drafted in 1986, the vibration performance standards, which had applied when the property was purchased, were deleted. The city stated that this was because the matter of vibrations was specifically addressed in the *EPA*, leaving municipalities with no authority to regulate on this matter under the zoning provisions of the *Planning Act*. As a result, the city told the applicants that it was "not aware of any tools available to the municipality to deal with this matter at the present time."

The applicants did not indicate whether they had considered taking legal action against the neighbouring facility. Under section 103 of the *Environmental Bill of Rights, 1993 (EBR)* any person in Ontario who experiences direct economic or personal loss because of a public nuisance causing harm to the

environment may sue for damages or other personal remedies without having to obtain the Attorney General's consent.

Ministry Response

On March 3, 2008, the ECO was informed that MOE agreed to undertake an investigation. On May 16, 2008, MOE sent the results of the investigation to the applicants. MOE concluded that, "vibration levels did not exceed any ministry vibration limits..." since the vibration limits in MOE's NPC-207 only apply to "points of reception", which are defined as locations where people live on a permanent or temporary basis (e.g., residences, hospitals, nursing homes, hotels, etc.). Nonetheless, because under the *EPA*, an adverse effect (e.g., loss of business, interference with the normal conduct of business) can occur without an exceedance of ministry criteria, MOE referred the matter of alleged adverse impacts to its Investigations and Enforcement Branch. No information was provided on how long it would take the branch to review the information.

MOE confirmed that the stamping facility had installed equipment without a C of A (Air) for noise emissions. As a result, a Provincial Officer's Order was issued to the stamping facility requiring them to apply for a C of A. An application for a C of A was posted on the Registry with a 30-day public comment period from November 19, 2007 to December 19, 2007. According to MOE, the C of A is still under review by the ministry's Environmental Assessment and Approvals Branch.

ECO Comment

The ECO has discussed the matter of provincial and municipal jurisdiction regarding the regulation of noise, vibrations, dust, etc. in the past. In the Supplement to the 2003/2004 Annual Report, the ECO noted that the *Municipal Act*, 2001, which came into force in January 2003, gives municipalities certain powers to prohibit and regulate noise, odour, dust, vibration and outdoor lighting. The *EPA* was concurrently amended to eliminate the need for MOE approval of municipal by-laws relating to noise and other nuisances. This would seem to contradict the information provided to the applicants by the City of Windsor regarding its capacity to regulate vibrations caused by stamping facilities. Despite this denial, it is the understanding of the ECO that the City of Windsor does indeed have the power to pass a noise/vibrations by-law. This is a matter that should have been clarified for the applicants by MOE.

Moreover, while the ECO commends MOE for undertaking an *EBR* investigation and for subsequently tasking its Investigations and Enforcement Branch with investigating the adverse effects of the vibrations, we are still concerned that the limited definition of "points of reception" in NPC-207 effectively exempts commercial facilities from provincial noise restrictions. The ECO believes that MOE should correct this policy gap to ensure that Ontarians are adequately protected from the adverse impacts of vibrations both at home and in the workplace.

The ECO is also extremely troubled that the stamping facility was operating and continues to operate without a C of A. On May 31, 2007, prior to the Provincial Officer's Order, an MOE staff member stated in a letter to the applicants' lawyer, "I can advise that [the stamping facility] does not have a Certificate of Approval for its operation. I can also advise that while the ministry is at this time considering requiring [the company] to acquire a Certificate for the operation, it is the ministry's position that...issuance of such an instrument would do nothing to assist your client's present predicament." Although MOE has subsequently issued an order requiring the facility to apply for a C of A, it is troublesome that MOE was initially "considering requiring" the stamping facility to acquire a C of A when it is clearly a requirement under the *EPA*. Section 9 (7) of the *EPA* states that "No person shall use or operate a plant, structure, equipment, apparatus, mechanism or thing for which a certificate of approval is required under clause (1) (a) unless the required certificate of approval has been issued and complied with."

The ECO is disappointed that no information was provided to the applicants on the timeline of the review of the C of A by the Environmental Assessment and Approvals Branch or the anticipated timeline of the investigation by the Investigations and Enforcement Branch. This leaves the applicants in the dark as to when there may be a resolution to their situation.

Review of Application I2008001:

6.1.2 Alleged Contravention of Sections 6 and 14 of the *EPA* re: Discharge of Stormwater via Cobourg Sewer Pipe (Investigation Undertaken by MOE)

Geographic Location: Cobourg

Background/Summary of Issues

In April 2008, two applicants requested an investigation by the Ministry of the Environment (MOE) of a stormwater sewer pipe constructed by the Town of Cobourg (the "Town"). The applicants alleged that in constructing the sewer, the Town has enabled the discharge of high levels of total coliform and *E. coli* into Lake Ontario, contravening sections 6 and 14 of the *Environmental Protection Act (EPA)*. Section 6(1) of the *EPA* prohibits a person from discharging or permitting the discharge of a contaminant into the natural environment in an amount, concentration or level in excess of that prescribed by the regulations. Section 14(1) of the *EPA* prohibits a person from discharging or permitting the discharge of a contaminant into the natural environment that may cause an adverse effect.

Background:

The Coverdale sewershed is located in the southeast end of the Town of Cobourg. The southern portion of this sewershed is principally a low-density residential subdivision serviced by municipal piped water and sewers. Prior to 2006, stormwater in this neighbourhood was conveyed by roadside ditches and grass swales south along Coverdale Avenue to a culvert that discharged onto the north shore of Lake Ontario. Historically, a drainage ditch originating from the northern portion of the sewershed also carried stormwater to Brook Creek west of Coverdale Avenue.

In October 2005, MOE issued a Certificate of Approval (C of A) under section 53 of the *Ontario Water Resources Act* to the Town to construct storm sewers on Coverdale Avenue, and to replace and construct a new outfall structure that discharges stormwater to Lake Ontario. As a municipal undertaking, the project was subject to the Municipal Engineers Association Class Environmental Assessment ("Class EA") process. Although the Town originally considered the proposed undertaking as a Schedule B project, it later reconsidered this classification and submitted its C of A application for a Schedule A project. Because Schedule A projects are by definition limited in scale and are expected to have minimal adverse environmental effects, these projects are pre-approved and may proceed to implementation without public consultation or an Environmental Assessment. In contrast, for Schedule B projects, proponents are required to undertake a screening process to ensure that public concerns are addressed before implementation.

In 2006, the Town constructed the storm sewer on Coverdale Avenue as part of the Coverdale Avenue Reconstruction Project (the "Project"). The Project involved: the construction of curbs and gutters along the roadway; the installation of storm sewer improvements; the reconstruction of watermain facilities; and the connection of residential foundation drains/sump pump lines to the new storm sewer. The reconstructed stormwater system, which MOE states is typical of other municipal systems along the Lake Ontario shoreline, was designed to intercept some of the peak flows to Brook Creek and therefore minimize flooding and property damage. The new sewer outfall structure empties to the lakeshore below Lookout Point Park, a 77-foot wide lookout bluff that does not allow for easy access to the shoreline by the general public. MOE notes that while local residents use this park area as a beach, it is not formally recognized or monitored for bacteria levels by the Local Health Unit.

Alleged Contraventions of the EPA:

The applicants allege that the reconstruction of the stormwater outlet has resulted in the discharge of contaminants (total coliform and *E. coli*) into the natural environment, and that this illegal discharge (under the *EPA*) has caused adverse effects. To support this allegation, the applicants submitted the results of water samples collected from the outlet area on several occasions, including once before the

reconstruction of the outfall (see Table 1 for the results of the water samples). The samples collected on one date (September 25, 2007) were collected by the Ganaraska Region Conservation Authority (GRCA). The applicants believe the test results indicate that "the beach had pristine waters before the installation" and that levels of bacteria grew exponentially afterwards, "leaving the public beach waters at toxic, unswimmable levels."

The applicants state that other adverse effects of the outfall include garbage accumulation, algae slime, offensive odours, and the accumulation of dead birds and fish. The believed cause of death for dead birds collected and tested in a laboratory by one of the applicants is avian botulism. While the applicants acknowledged that bird mortality was observed at other locations during fall 2007, they noted that bird deaths at Look Out Point Park occurred throughout the summer.

Project Approval:

The applicants state that it is unclear how the Project could have been classified as a Schedule A project under the EA process. The applicants argue that because the storm sewer outlet is larger (77-feet wide) than a road allotment (66-feet wide), the Town is unjustified in classifying the Project as a "municipal right-of-way" type of project. Moreover, the applicants argue that "in classifying this project as a Schedule A project, many of the environmental assessment and public consultation requirements have been lost."

Ineffective Remediation:

The stormwater sewer outfall discharges onto an exposed rock shelf before flowing into Lake Ontario. The applicants stated that the stormwater outlet has resulted in extensive algae blooms in standing water beneath the outfall. To address the stagnant water on the rock shelf and its potential contribution to algae growth and unpleasant odours, the Town and the GRCA excavated small trenches along the limestone rock in the direction of flow to help drain the water into the lake. The applicants maintain that despite these remediation efforts, they are still concerned about the contents and impacts of the sewer outfall. They noted that the water sample with the highest *E. coli* count was collected after the trenches were cut, thus revealing the ineffectiveness of this measure.

Ministry Response

MOE accepted the application for investigation and advised the applicants on July 31, 2008 that its investigation would include sampling throughout the summer months. As a result, MOE advised that it would not be able to complete the full investigation by the original deadline (August 9, 2008). MOE advised that it intended to complete the necessary work by October 21, 2008 and provide the applicants with its findings by November 30, 2008. On December 1, 2008, MOE responded to the applicants with the results of its investigation. The investigation concluded that "the stormwater quality is within ranges that may be expected for such municipal stormwater sewer systems; however, the outflow may lead to localized negative effects in the near-shore environment close to the outfall, under certain weather conditions."

Alleged Contraventions of the EPA:

As a major component of its investigation, MOE undertook a technical assessment of the quality (and potential related impacts) of the water in the area of the stormwater sewer outfall. MOE tested the total coliform and *E. coli* levels of samples collected on three occasions over summer 2008. The technical report concluded that the sampling results provided by the applicants, the GRCA, and MOE (see Table 1) are all within the range of expected urban stormwater quality.

Although MOE acknowledged that the sample collected by the applicants on October 23, 2007 had extremely high *E. coli* levels (168,000 counts/100 mL), the ministry pointed out that this sampling coincided with a heavy rainfall event, which would have resulted in "first-flush" conditions containing high concentrations of contaminants in the surface water runoff. MOE noted that in contrast, most of the other analyzed samples, including the one taken before the sewer reconstruction, were collected during dry weather (see Table 1). The ministry therefore attributed variance between samples to seasonal conditions and weather patterns prior to sampling (e.g., length of time between significant rain events and the time of sampling from the start of a rainstorm). The technical report reasoned that the high *E. coli*

count observed in the October 23, 2007 sample could just as easily have been observed prior to the 2006 storm sewer upgrades under heavy rainfall conditions. Sampling by the ministry and the GRCA did not replicate this higher value but rather, MOE "found lower levels of bacteria considered to be more typical of the system under various weather conditions."

The ministry concluded that "the stormwater outflow during times of higher levels of bacterial contamination and other 'nutrients' (e.g., phosphorus) may lead to localized effects in the lake in the immediate vicinity of the outfall; however the extent would generally be limited to the area below the outflow due to high dilution and mixing within the lake." The MOE technical reviewer did not find any evidence to indicate that the quality of stormwater runoff would have worsened as a result of the reconstruction of the stormwater sewer in 2006.

Table 1: *E. coli* counts in water samples collected by local residents, the GRCA and MOE from the Coverdale Avenue stormwater outlet and east and west of the outlet, July 2005-August 2008

Date		E. coli (counts/100 mL)			Daily Precipitation
	Outlet	East of outlet	West of outlet		-
July 18/05	58	-	-	Resident	0 mm
Sept. 25/07	2	-	-	GRCA	11.8 mm ¹
Oct. 23/07	168,000	-	1,800	Resident	12.4 mm
June 19/08	100	-	-	MOE	0.6 mm
July 9/08	250	56	36	MOE	2.6 mm
Aug. 11/08	16	4	4	MOE	0.8 mm

Sources: Coverdale Storm Sewer Outlet Discharge Assessment: Town of Cobourg, Ontario (Ministry of the Environment, November 2008); Environment Canada Weather Reports.

In addition to taking water samples, ministry technical staff visually observed the outlet area and found algae biomass growth on the rocks downgradient of the outlet structure. Although MOE deemed it difficult to determine if current algae conditions have worsened as a result of the outlet reconstruction, the ministry acknowledged that because the new structure is much larger than the original culvert and the discharge fans out onto an area of flat limestone, the new structure may result in a larger area of impact, an impact that would be more pronounced during low lake water levels. MOE also acknowledged that the Town's digging of trenches to drain stagnant water from the rock shelf "has not been overly successful."

With regard to the applicants' concerns of dead birds near the outfall, MOE noted that the Canadian Cooperative Wildlife Health Centre (CCWHC) led an investigation of the incidents of dead wild birds along the Lake Ontario shoreline during summer/fall 2007. Through laboratory testing, the CCWHC determined that a number of dead birds collected along the shoreline, including from Victoria Park in Cobourg, died from Avian Botulism – Type E. Type E Botulism is a form of food poisoning that occurs when animals ingest the botulinum toxin produced by the bacteria species *C. botulinum*. According to Environment Canada, Botulism occurs most often in mid-to-late summer, on shallow lakes, during periods of hot dry weather. Incidents are frequently associated with a lack of oxygen in the water that often occurs after blue-green algae has bloomed. MOE reasoned that because dead water fowl were found at other shoreline areas, the death of birds at the outfall was not related to the quality of the discharged stormwater. The ministry referred the applicants to the CCWHC for further information on this issue.

Project Approval:

The ministry determined that the Town's decision to classify the Project as a Schedule A project was appropriate and that all requirements for the Class EA process were met. MOE stated that "although the municipal right-of-way definition may not have been met exactly (i.e., there is no existing road surface within the parkette area), the stormwater sewer project is considered to have been located within an existing utility corridor which does allow for the Project to be classified as a Schedule A project." As such, the city was not required to notify or consult with the public, or to undertake an EA study.

¹Although the Environment Canada Weather Report indicates a storm event on September 25, 2007,GRCA field notes suggest that the storm had not yet occurred at the time of water sampling

MOE is also satisfied that the stormwater sewer was "constructed in accordance with recognized standards and in accordance with the [C of A] that was issued by the ministry for its consideration." To confirm that there are no illegal sanitary sewer connections contributing to the stormwater sewer (and thus affecting the water quality), the Town undertook a video camera inspection of the sewer.

Ministry Recommendations:

MOE stated that it is working with the Town to ensure that beneficial management practices are implemented to improve stormwater quality, and determine additional actions to minimize the negative effects resulting from the outfall's discharged stormwater. The ministry made several recommendations to the Town to improve stormwater quality (and associated shoreline conditions) and minimize human health impacts. Recommendations include: advising beach users that water quality may not be suitable for recreational use following a storm event; inspecting the outfall and adjacent shoreline for garbage and debris; maintaining the roadside ditches and grassed swales to provide infiltration and settling opportunities for stormwater runoff; and considering the inclusion of stormwater discharges in the Town's Pollution Control Plan.

ECO Comment

The ECO is pleased that MOE agreed to undertake this application for investigation and, as part of this undertaking, conducted a technical assessment of the sewer outlet's water quality and potential related impacts. Moreover, the ECO agrees with the ministry that the *E. coli* levels in water samples submitted by the applicants do not prove that the quality of the stormwater discharge was affected by the reconstruction of the stormwater sewer. Urban stormwater runoff is known to often contain high levels of bacteria, heavy metals, pesticides and other pollutants, particularly during the first flush of a storm event. The high *E. coli* levels in the October 2007 sample were therefore likely a result of the heavy rainfall on that day. Such high *E. coli* levels could have likewise been observed in water samples collected prior to the sewer's reconstruction, had they been sampled under similar weather conditions.

While the ECO agrees with MOE that the analyzed water samples suggest that the stormwater quality is within ranges expected for municipal stormwater sewer systems, the ECO does not believe that the samples analyzed by the ministry were collected "under various weather conditions," but instead under generally dry circumstances. The ECO believes that by sampling the outlet during a wide variety of weather conditions (including heavy storms), MOE would be better able to estimate the *E. coli* levels typical of this outfall, compare them to levels of other systems, and more fully attribute variance in *E. coli* levels to precipitation levels.

We note that *E. coli* levels as high as that in the October 2007 sample can sometimes suggest the presence of leakages or cross-connections with sanitary sewers. It is reassuring that the Town's video camera inspection and the low *E. coli* levels in samples collected during low-flow periods both strongly suggest that there are no sanitary sewer cross-connections.

The ECO agrees with MOE that while the *E. coli* levels of some of the water samples exceeded the Provincial Water Quality Objective (PWQO) for the protection of swimming and bathing beaches (100 counts / 100 mL), such levels are expected during significant storm events and are considered short-term. Nevertheless, the ECO is surprised that given the options and recommendations in MOE's Stormwater Management Planning and Design Manual, it appears the Town did not consider the existence of a known, although not formally recognized, recreational beach and either relocate the outfall or extend the sewer pipe farther into the lake.

This application for investigation illustrates the problems associated with managing urban stormwater runoff. While stormwater management systems provide necessary functions for urban areas to prevent potential flooding, the collection of animal feces, pesticides, road salts, and other contaminants in stormwater as it runs over paved surfaces can result in highly polluted discharge. As the ECO wrote in our 2004/2005 Annual Report, "[i]n areas undergoing the 'hardening' process of paving and building, and enclosing previously open drainage ditches into buried pipes, major changes in runoff intensity and volume occur that can have devastating impacts on downstream watercourses."

Fortunately, "green infrastructure," like trees, parks and wetlands, can capture, retain and filter runoff before it reaches a sewer system. Moreover, permeable pavements (such as permeable asphalt, permeable concrete, and interlocking pavers) can filter and store runoff by allowing stormwater to infiltrate directly or pass through them. The ECO supports MOE's recommendation that the Town consider maintaining the roadside ditches and grassed swales to provide infiltration and settling opportunities for stormwater runoff. Furthermore, the ECO supports MOE's other recommendations to the Town, particularly with regard to minimizing the extent of algae growth on the rock substrate and including stormwater discharges in the Town's Pollution Control Plan. It lies within the realm of technical feasibility for the Town to reduce stormwater flow contamination to levels consistent with generally good receiving water quality.

For further discussion of stormwater management, please see pages 106-110 of the ECO's 2003/2004 Annual Report and pages 152-155 of the ECO's 2004/2005 Annual Report.

Review of Applications I2008002 – I2008007:

6.1.3 Alleged Contraventions of the Environmental Protection Act, Ontario Water Resources Act,
Fish and Wildlife Conservation Act, and Federal Fisheries Act
re: Soil and Groundwater Contamination at a Former Industrial Property
(Investigations Undertaken in part by MOE; Investigations Denied by MNR)

Geographic Area: St. Catharines, Ontario and Wainfleet, Ontario

Background/Summary of Issues

In April 2008, two Ontario residents submitted four applications for investigation under the *Environmental Bill of Rights, 1993 (EBR)* relating to a former industrial property on Glendale Avenue in St. Catharines, Ontario.

The applicants' concerns arose from the remediation and redevelopment of the property. The property was used for industrial purposes for several decades. The property was most recently used by Domtar Fine Paper, which closed its mill in 2004. A portion of the property has since been redeveloped and includes a restaurant ("restaurant site"), while another portion is in the process of being redeveloped for the construction of a supermarket ("supermarket site"). A realignment of Glendale Avenue adjacent to the property also resulted in some reconfiguring of the property so that the supermarket site is set apart from the remainder of the property. The surrounding land use is predominantly residential.

The applicants alleged that the developer failed to properly remediate the property, and that contaminants from the former industrial use of the property have been and continue to be discharged into the environment. In particular, the applicants requested investigations related to:

- mercury, arsenic and lead contamination allegedly remaining in soil on the proposed supermarket site after remediation was completed;
- oily water in an excavation on the supermarket site allegedly remaining after remediation;
- alleged abandonment of and interference with monitoring wells on the supermarket site;
- alleged discoloured soil and mercury contamination on the restaurant site;
- thousands of gallons of mercury contaminated water from the portion of the property adjacent to the restaurant that were allegedly deliberately discharged into a storm drain, and ultimately into Lake Ontario:
- alleged destruction of a sewer catch basin to avoid detection of the discharge of contaminated water into the storm sewer system; and

• deposition of thousands of tons of soil allegedly contaminated with mercury, arsenic, lead and copper at the Station Road Landfill, the Township of Wainfleet (a short distance from Lake Erie), which is not equipped to receive hazardous waste.

The applicants were concerned that contaminated soil and water at the former Domtar property, as well as the deposit of excavated contaminated soil from the property at the Station Road Landfill, threaten local water resources and ecosystems. The applicants stated that the *Environmental Protection Act* (*EPA*), *Ontario Water Resources Act* (*OWRA*), *Game and Fish Act* (now the *Fish and Wildlife Conservation Act*, 1997) and the federal *Fisheries Act* have been contravened.

The applicants alleged the developer has been untruthful about the remediation of the site and has disregarded environmental requirements throughout the process, and that the regional municipality and local Ministry of the Environment (MOE) office had mishandled the matter.

The applicants included detailed narratives prepared by one of the applicants, correspondence, media clippings, photographs, audio recordings, and various other documents as evidence to support their applications.

The ECO forwarded the applications relating to alleged *EPA* and *OWRA* allegations to MOE for a response. The applications relating to the *Fish and Wildlife Conservation Act, 1997 (FWCA)* and the *Fisheries Act* were forwarded to the Ministry of Natural Resources (MNR).

This suite of applications stems from the same circumstances that formed the subject of an application for investigation submitted by the same applicants to the ECO in March 2007. In that application, the applicants alleged that the developer had failed to remove the mercury-contaminated soil from the property, and had instead re-buried the soil in the excavated area. MOE declined to undertake an investigation in that case because it was already conducting an equivalent investigation as a result of earlier communications from the applicants.

The ECO understands that MOE staff met with the applicants in August 2007 to relay the outcome of soil sampling conducted as part of that earlier investigation, which indicated no environmental concerns in the area that was previously excavated. Also related to the earlier investigation, MOE later provided the applicants with the results of additional soil and groundwater sampling taken within the area of excavation, which revealed only one mercury exceedance below the excavated soil area, and was "not sufficient to confirm [the applicants'] allegation that there was widespread re-burial of contaminated material by the property owner." MOE also indicated that it had received receipts showing the excavated soil had been properly landfilled by the property owner. These receipts indicated the disposal of significant amounts of contaminated soil at a local private waste disposal site in mid-2006.

The ECO reported on the March 2007 application in the Supplement to our 2007/2008 Annual Report at page 298.

Ministry Response

Ministry of the Environment – July 2008:

In July 2008, MOE advised the applicants that it had concluded that certain aspects of the application related to the supermarket site warranted further investigation. Specifically, MOE agreed to undertake an investigation to determine whether the Record of Site Condition (RSC) submitted to MOE following remediation of the supermarket site in 2004 accurately reflected the environmental conditions at the site, and whether contamination remained at the site at concentrations in contravention of the *EPA* and its regulations.

MOE declined to undertake an investigation of the remaining allegations. In some cases the ministry declined to investigate because it would duplicate a previous or ongoing investigation. For example:

 MOE staff were already looking into monitoring well abandonment on the supermarket site as a result of allegations made by the applicants previously;

- MOE noted that the developer openly admitted to discharging surface water from the excavation at the property in 2006. The allegation of historical discharge of contaminated water was referred to the ministry's Investigations and Enforcement Branch in December 2007, and an investigation is ongoing; and
- MOE had previously reviewed the circumstances regarding the disposal of contaminated soil from the Glenwood Avenue property to the Station Road landfill, including inspections of the landfill in September 2007 and in May 2008, and found no evidence of a contravention.

Under section 77(3) of the *Environmental Bill of Rights, 1993 (EBR)*, an investigation is not required where it would duplicate an ongoing investigation.

Regarding other allegations, MOE concluded that an investigation was not warranted due to lack of sufficient evidence supporting them. For example, MOE indicated that sampling of the black seam of soil at the restaurant site by the developer's consultant, as well as audit sampling conducted by MOE, did not support the applicants' contention that the material was hazardous, and there was no additional evidence to warrant further investigation.

MOE noted in several instances that the applicants' evidence – which varied from application to application but consisted of photographs, correspondence, media articles, maps, opinion, and, in one case, a flyer prepared and distributed by one of the applicants – provided "no direct evidence of legislative contraventions in the applications by any of the named applicants."

MOE did advise that the site owner undertook a more in-depth evaluation of groundwater quality and flow patterns at the site, and that MOE technical experts were reviewing the draft report for this work. In November 2008, MOE wrote to the applicants to provide the results of the site owner's consultant's hydrogeological study at the site, and advised that the ministry groundwater experts concluded that "the groundwater quality poses a low risk of adverse effects and does not provide the basis for further action by the ministry based on the technical assessment."

MOE also advised that the developer provided the ministry with a letter of commitment to file a Record of Site Condition for the entire property, which the ministry stated would provide an opportunity for public consultation. The ministry indicated that the applicants would be informed of this opportunity.

In its decision summary, MOE did not comment on the applicants' allegations about the developer's behaviour or the treatment of the matter by the regional municipality or local MOE office.

On August 15, 2008, one of the applicants wrote to the Minister of the Environment to express his grave dissatisfaction with the Ministry's responses to the applications, particularly with the Ministry's response regarding the applicants' concerns about the deposit of contaminated soil at the Station Road Landfill. The applicant also disagreed with the Ministry's comments in its decision notices that the photographs, correspondence and opinions submitted by the applicants were not sufficient evidence of the alleged violations. The applicant wrote a similar letter to the ECO.

Ministry of the Environment - December 2008:

In December 2008, MOE wrote to the applicants to inform them of the outcome of MOE's investigation into whether the RSC for the Glendale Avenue property that was submitted to the ministry in 2004 accurately reflected the contaminant levels on the property, and whether contaminants remain at the property. MOE also notified the alleged contraveners of the outcome of the investigation.

To provide context, MOE explained that an RSC is a document, prepared and signed by a Qualified Person pursuant to O. Reg. 153/04 made under the *EPA*, that documents the environmental condition of a property. MOE explained that the RSC submitted for the supermarket site was submitted during the transition period before O. Reg. 153/04 came into effect, and that the filing of an RSC in this case was not a legal requirement. Filing an RSC with MOE is only required if a property will be changing to a more sensitive land-use.

In its decision summary, MOE stated that in undertaking the investigation MOE staff reviewed the background documents and reports used to prepare the RSC. MOE staff also inspected the proposed supermarket site, met with the property owner's environmental consultants, and undertook its own verification sampling of soil and groundwater at the site.

MOE provided a copy of its sampling results for over 50 soil and water samples taken at the supermarket site, and indicated the applicable ministry standard for each parameter. MOE stated that the soil sampling results indicated no exceedances of ministry standards, with the exception of beryllium, which was present at trace levels in two samples. MOE stated that

Experts at the ministry's Standards Development Branch were consulted about these beryllium results. They indicated that the trace concentrations found on this property in two samples do not pose a risk of adverse effects or justify further action by the ministry.

MOE noted that it is not an offence for a property to be contaminated in excess of the criteria set out in O. Reg. 153/04, unless the contamination causes an adverse effect.

MOE's sampling did not identify any exceedances of contaminants in water at the site. Further, MOE did not observe any oil sheen or "globules" on the water as alleged by the applicants.

MOE concluded that the RSC for the supermarket site accurately reflects the environmental conditions of the site, and that there is no evidence that contamination remains on the site at concentrations in contravention of the *EPA* or its regulations. Accordingly, the investigation did not identify any legislative contraventions by the actions of the property owners.

However, MOE noted that as a result of the re-alignment of Glendale Avenue since the RSC was filed, the size of the proposed supermarket site has been slightly reduced. Although MOE does not have grounds to compel the landowner to amend the RSC to address the site boundary change, in its letter to the property owner MOE requested that the owner amend the RSC to reflect the site property boundary changes.

Ministry of Natural Resources – August 2008:

In August 2008, MNR declined to undertake the requested investigations. MNR explained in its decision that the matters described in the applications for investigation fall outside of the scope of the *FWCA* (formerly the *Game and Fish Act*), and therefore MNR has no legal authority to deal with the allegations.

MNR also explained that since 2003 the federal government has been responsible for the enforcement of the habitat and deleterious substances provisions of the federal *Fisheries Act*. MNR provided the applicants with information about the relevant provisions of the *Fisheries Act*, the roles and responsibilities of the Department of Fisheries and Oceans, and the process for submitting a petition to the Federal Commissioner of Environment and Sustainable Development regarding the *Fisheries Act* allegations.

Other Information

In June 2008, the applicants submitted two petitions to the federal Commissioner of the Environment and Sustainable Development (CESD) relating to the same matter as the applicants' *EBR* applications. The first petition (no. 257) expressed concerns about potential effects of leachate from the Station Road Landfill site on groundwater and Lake Erie; the second petition (no. 258) expressed concerns about the alleged pumping of mercury contaminated water into a storm sewer in St. Catharines.

Health Canada (jointly with the Public Health Agency of Canada) provided written responses to the relevant questions asked in the petitions in October and November 2008. Environment Canada provided its responses in December 2008. The petitions to the federal CESD, as well as the responses by the federal departments of Environment and Health, can be accessed via the Auditor General of Canada's website at www.oag-bvg.gc.ca.

ECO Comment

The ECO believes that MOE and MNR's handling of these applications was reasonable.

MOE was already looking into many of the allegations in the applications as a result of previous communications from the applicants, and it is both reasonable and permissible to decline to undertake an investigation where it would duplicate a previous or ongoing investigation. The ECO urges MOE, to the extent possible, to keep the applicants informed of the progress and outcomes of those investigations, even though they are not being conducted under the *EBR*. The ECO recognizes this may not be possible in all cases. The ECO will continue to monitor the ministry's handling of this matter.

MNR's decision not to undertake an investigation was equally reasonable. The allegations did not fall within the scope of legislation administered by MNR (namely, the *FWCA*), and therefore MNR had no reasonable basis or authority to undertake an investigation. Further, the information that MNR provided to the applicants about making a petition to the federal CESD about the alleged *Fisheries Act* contraventions was helpful. The ECO is disappointed, however, that MNR was several weeks late in providing its decision to the applicants. Given the straightforward nature of MNR's response, this delay is inexcusable.

The ECO is pleased that MOE did agree to undertake an investigation of the applicants' allegations for which no existing investigation was already being conducted. MOE's investigation appears to have been thorough, and the soil and water sampling conducted by MOE should provide comfort to the applicants that the supermarket site does not pose a risk of adverse effects. However, as MOE did not complete the investigation within the legislated timeframe, MOE should have kept the applicants updated about how long the investigation would take.

Although MOE's treatment of these applications was reasonable, the ECO is concerned about MOE's comments regarding the evidence submitted by the applicants in support of their applications. While a component of the applicants' evidence consisted of unsupported opinion, other evidence in the form of personal observations, photographs, recordings and other documents are a legitimate way to support a concern about potentially serious harm to the environment. A lack of direct evidence should not preclude MOE from considering whether an investigation is warranted. The ECO has stated in the past that the evidentiary burden on applicants should be low. Applicants should not be expected to provide evidence of the same calibre that can be gathered by the police, government agencies and other organizations with legal powers and financial resources.

Review of Application I2008008

6.1.4 Alleged Contravention of the *Environmental Assessment Act* by the City of Toronto (Investigation Denied by MOE)

Background/Summary of Issues

In August 2008, two applicants filed an application for investigation on behalf of the cycling advocacy groups Take The Tooker and Bells on Bloor. The applicants alleged that the City of Toronto failed to comply with the *Environmental Assessment Act (EAA)* because of its failure to properly classify the Bloor Street Transformation Project under the Municipal Class Environmental Assessment (MCEA). *Background:*

On its website and in other documents describing the project, the City of Toronto states that the purpose of the project is to beautify Bloor Street between Church Street and Avenue Road, transforming it into "a world class, pedestrian oriented" shopping and dining destination. As summarized by the Divisional Court in a related civil proceeding decided in October 2008 (see Other Information below), the project calls for the resurfacing of Bloor Street and the widening and resurfacing of the sidewalks. The project consists of

several interdependent components including: "widening sidewalks by 1.2 metres, and resurfacing them with granite"; replacing and planting more than 130 trees; reconstructing the road while maintaining four lanes for traffic; repositioning and reconstructing two 'lay-bys' for pick up and drop off; making minor changes to curbs at the intersections to conform with current requirements; replacing certain traffic signals and street lights; and installing decorative lighting. Existing street parking for 54 vehicles also will be eliminated.

The project was first developed and proposed in 1998 by approximately 1,800 businesses who were members of the Bloor-Yorkville Business Improvement Area (BYBIA) in the Bloor-Yorkville area. In June 2006, the Bloor Street Business Improvement Area (BSBIA) was created when city council passed By-law #519-2006. The primary purpose of the by-law is to facilitate financing and implementation of the project. While the city has agreed to pay for the road construction work, the other work will be paid for through a city loan to the BSBIA members (up to a maximum of \$20,000,000) and the monies will be repaid through annual levies over the course of 20 years. BYBIA members also will be financially supporting the project, and purchased advertising in The Globe and Mail in April 2009 touting it as an effort to cultivate a greener Bloor Street with green spaces but also more than 7,000 parking spaces.

A construction contract was signed by the city on July 7, 2008 at a cost of \$20 million and work was underway at the time the application was filed. Phase 1 involves work east of Yonge Street that was scheduled to be completed by December 31, 2008 but remained incomplete as of early March 2009. Phase 2 consists of work west of Yonge Street, anticipated to be completed by December 31, 2009.

Consultation about the Project:

The MCEA is an approved planning document which was developed by the Municipal Engineers Association (MEA) in the 1980s and describes the process that proponents must follow in order to meet the requirements of the *EAA*. The Class EA approach allows for the evaluation of the environmental effects of alternatives to a project and alternative methods of carrying out a project. It includes minimum requirements for public input and expedites the environmental assessment of smaller recurring projects. The MCEA underwent its last major revision in 2000 and was approved with conditions by Cabinet in October 2000. An amendment to the Class EA was approved on September 6, 2007.

The MCEA sets out different levels of environmental assessment (EA) study, or "schedules" for different types of activities based on their environmental significance and their effects on the surrounding environment. Schedule A or A+ undertakings are routine activities considered "pre-approved." Schedule B undertakings require consultation with directly affected parties, a site analysis, and filing of a consultation and documentation record, which must then be made available to the public. Schedule C undertakings need more scrutiny; they require an environmental study report and several stages of public consultation. For further information, see Table 1.

Table 1 – Project Categories under the MCEA (2007)

	Schedule A: These projects, which generally include normal or emergency operational and maintenance activities, are limited in scale and have minimal adverse environmental effects. They are pre-approved and may proceed to implementation without following the full Class EA planning process.
	Schedule A +: This category was introduced by the MEA in 2007. The purpose of Schedule A + is to ensure some type of public notification for certain projects that are preapproved under the Municipal Class EA. On its website, the MEA claims there is no ability for the public to request a Part II Order on an A+ project. The MEA suggests that if the public has any comments, they should be directed to the municipal council where they can be more appropriately addressed.
Schedule B	Schedule B projects have the potential for some adverse environmental effects. The proponent is required to undertake a screening process, involving mandatory contact with directly affected public and with relevant government agencies to ensure that they are

	aware of the project and that their concerns are addressed. If there are no outstanding concerns, then the proponent may proceed to implementation. Schedule B projects generally include improvements and minor expansions to existing facilities. If however the screening process raises a concern which cannot be resolved, the minister may elect to issue a Part II Order. Alternatively, a proponent may elect voluntarily to plan the project as a Schedule C undertaking.
Schedule C	Schedule C projects have the potential for significant environmental effects and must proceed under the full planning and documentation procedures specified in the MCEA. These projects require proponents to prepare an Environmental Study Report (ESR) for review by the public and review agencies. Schedule C projects generally include the construction of new facilities and major expansions to existing facilities. If concerns are raised that can not be resolved, the minister may issue a Part II Order.

Source: Based on summary available on the website for York Region: www.york.ca.

As noted in Table 1, MOE has the legal authority to make orders under Part II of the *EAA* when a person or party raises a concern about a Class EA process. One common concern is that a project has not been properly classified and should be "bumped up" to a higher or more restrictive category (e.g., from Schedule A or A+ to B). The minister then has discretion to make an order requiring a proponent to comply with Part II of the *EAA* before proceeding with a proposed undertaking to which the Class EA would otherwise apply. Although MOE has received thousands of bump-up requests in the past 25 years, few have been granted.

The MCEA requires a proponent to fit the specific types of projects and activities within categories in tables provided in its appendices to determine the applicable schedule. There are 42 categories in the MCEA table for road projects. Each category specifies the resulting schedule that applies. The applicable schedule for some of the categories depends upon the cost limit of the project, in effect a measure of the scale of the project. The MCEA provides that, in determining the appropriate project schedule, the proponent is to deal with the project in its entirety. The term 'project' is defined in the MCEA glossary as all the interdependent components initiated to solve a single problem: "If the components are interdependent, then they shall be dealt with as a single project. ... Proposed works are separate projects if: they are initiated to solve distinctly different sets of problems." The MCEA prohibits the "piecemealing" of a project into different parts and the classification of each part independently in order to reduce a proponent's responsibilities. Appendix 1A of the MCEA also states that a proponent "may elect to undertake an individual EA should the magnitude of the project, the anticipated environmental impact or its controversial nature warrant it."

In affidavits filed for a 2008 court action described below under Other Information, a city official stated that a former staff member classified the project in 2001 as a Schedule A project. The city official claimed that the classification decision was an informal one made by a city engineer, familiar with the MCEA, after meeting with the project architects one or two times and obtaining some details about the project. An email sent by the engineer in 2001 stated that "based on the scope of work that is being proposed there are no EA implications." However, the applicants provided information to the ECO in 2009 showing city staff still were debating the project classification decision in 2002 and 2003.

In 2007, the MCEA was revised and approved by MOE. Under the revised MCEA the project was reclassified as Schedule A+. Exactly when this happened is unclear to the applicants and the ECO.

There is no requirement under the MCEA to publish the classification of an A project but there is a requirement to publish the classification of an A+ project. However, it is apparent that, as of the spring of 2008, the City of Toronto had not made public its re-classification of the project. In addition, it appears MOE staff were confused about the proponent of the project, the legal status of the BSBIA and its relationship to the city. A letter sent by MOE's EA Branch to a cycling advocate on May 13, 2008 indicated that MOE considered the BYBIA and the BSBIA to be private proponents that were exempt from the *EAA* – apparently based on a conversation between MOE staff and city officials. However, both of

the BIAs are public bodies created by city by-laws and the city was proceeding, as required, under the MCEA.

In April and May 2008, a number of city residents with a strong interest in cycling issues began to raise concerns about the project. One long-term cycling advocate wrote MOE to inquire about the status of the project and its compliance with the *EAA*. MOE advised the cycling advocate that the city had classified the project as Schedule A+ under MCEA. In addition, some local businesses in the area also began to make inquiries to MOE about the project.

On July 8 and 18, 2008, the city held consultation meetings about the project for members of the BIAs and other interested parties. Various cycling organizations and members of the Safe Cycling Coalition made deputations to city council representatives and raised many of the concerns that are outlined in this application (see below).

In response, city officials told council, the BIA members, cycling advocates and the media representatives that the project does not preclude bike lanes being installed along the stretch of Bloor Street. The city's Director of Transportation Infrastructure Management also commented to the media in July 2008 that his staff had been asked by council to prepare a study on cycling facilities along Bloor-Danforth from Victoria Park in eastern Toronto to Royal York in the west, and they wanted to ensure that anything done on this short stretch of Bloor Street be consistent with other cycling infrastructure along the rest of Bloor Street. He went on to note that "the curb lane has been widened from about 3.5 metres to about four metres, which will improve cycling conditions for now."

The Nature of the Alleged Contravention:

The applicants contended that the interpretation of the MCEA and the consequent determination of the city's obligations to address and mitigate harm to the environment, as defined under the *EAA* and the MCEA, is a matter of vital importance to cyclists. The manner in which the MCEA is applied ultimately determines how roads are designed and built, which has an impact on the safety of individuals using bicycles – vehicles that constitute a significant and growing portion of city traffic.

The applicants contended the city classified the project under the wrong category, and failed to hold broad public consultations or consider design alternatives that would make more room for cyclists in the redesigned street. Since the estimated cost of the project is \$25 million, the applicants argued that the project falls well above the MCEA threshold that requires at least a Schedule B designation and perhaps even a Schedule C designation.

In their original application dated August 2008, the applicants stated that they could find no evidence that the project was ever classified by City of Toronto staff. The only evidence that existed at the time the application was filed was a letter to a member of the public from MOE's Environmental Approvals and Assessment Branch.

To illustrate how the city denied procedural rights to the public and failed to take specified steps intended to mitigate potential environmental harms, the applicants noted that Schedule B of the MCEA requires a wide range of procedures including: identifying the problem or opportunity; identifying alternative solutions to the problem; determining the appropriate schedule and documenting it in a project file; and preparing a physical description of the area and an inventory of the natural, social and economic environments.

The applicants argued that if the project had been properly classified as a Schedule B project, the public and interested members of the cycling community would have been able to shape dimensions of the project and to better promote cycling infrastructure along Bloor Street.

The applicants also noted that Bloor Street is one of the primary cycling routes in Toronto in terms of numbers of cyclists, and nearly 14 per cent of the traffic traveling along Bloor Street is cyclists.

The applicants also stated they were not comforted by the upcoming bike feasibility study along Bloor-Danforth. They noted that the study will examine the possibility of a bikeway rather than bike lanes – signs posted along the road rather than lines painted on it.

The applicants also pointed to the province's new planning regime – including the 2006 Growth Plan for the Greater Golden Horseshoe (GGH Growth Plan or plan) and the Provincial Policy Statement, 2005 (PPS, 2005) – which requires consideration of cyclists' safety in municipal planning decisions. They alleged that the city is ignoring the direction given in provincial planning laws and policies.

Section 3.2.3 of the GGH Growth Plan, which deals with "Moving People" states that "[m]unicipalities will ensure that pedestrian and bicycle networks are integrated into transportation planning to a) provide safe, comfortable travel for pedestrians and bicyclists within existing communities and new development."

The PPS, 2005 also provides policy direction for the provision and promotion of safe and energy efficient transportation systems including cycling lanes and other non-motorized movement as well as efficient land use patterns that support alternative modes of transportation.

The applicants also noted that the Bloor-Danforth east-west route has been identified since the early 1990s as an ideal cycling route. Indeed, a cycling route selection report prepared by Marshall Macklin Monaghan Ltd. for the City of Toronto in February 1992 noted that "the Bloor-Danforth was the most popular bicycle route according to the 1990 Bike to Work Survey."

In addition, the applicants provided significant evidence, particularly from a 2007 Toronto Public Health (TPH) report that details the many adverse impacts from motor vehicle pollution in Toronto. Since the project envisages that traffic levels will be maintained at current levels or actually increase on this section of Bloor Street, potential harm from air pollution seems clear.

Requests for Part II Orders:

As noted above, a resident who is concerned about a particular project may ask the minister to order that it be "bumped up" to comply with the Part II of the *EAA* – in other words, that the project be assessed under the full requirements of the *EAA* and not benefit from less onerous Class EA provisions.

One long-term cycling advocate wrote to the Minister of the Environment on three occasions in the spring and summer of 2008 regarding his concerns about this project. Regardless of whether the minister considered these letters as requests for a Part II Order, the minister could, on his own initiative, have made a Part II order but did not do so. In its response to the cycling advocate dated April 10, 2008, MOE noted that he had "requested that an individual Environmental Assessment be conducted for the project." However, MOE went on to explain that, under the MCEA, "there are no provisions to require the preparation of an individual EA for Schedule A+ projects" and denied the bump-up request. While this statement appears to reflect wording contained in the current MCEA, it does not appear to be legally correct. Section 16 of the *EAA* provides the minister with discretion to order a bump up for Schedule A+ projects and/or to impose additional conditions. Thus, it appears that MOE probably mishandled the bump-up requests filed by the cycling advocate.

In summary, the evidence presented by the applicants was that the city incorrectly classified the project because it chose a schedule (Schedule A+) – based on the activity categories set out in the MCEA tables – that could not apply to the fact situation of the project.

Ministry Response

On October 21, 2008, MOE denied the application, explaining that its staff had looked into the concerns described by the applicants and were provided with the relevant EA documents by staff at the city. MOE went on to describe the obligations of a proponent under the MCEA and noted that "the description of the undertaking is determined by the proponent and may be defined in broad terms or in very specific terms." Under the MCEA, "the proponent is to define the problem and opportunity and consider any alternatives prior to selecting the appropriate schedule for the undertaking" and rely on "sound professional judgment

of the municipal staff." In addition, the proponent does not select the MCEA category until after project planning has commenced. Since the Class EA process is a self-assessment process, the "determination of the appropriate schedule for a project should be based on the guidance provided in the MCEA," including the definitions, project activity tables and other information provided by the MEA.

MOE failed to expressly acknowledge that it might have mishandled the bump-up order but went on to state that it would have recommended that the minister not order an individual EA for the project.

On November 10, 2008, counsel for the applicants wrote to MOE, asking that MOE staff reconsider the decision. In his letter, he stated that the applicants "recognize that the Minister has discretion in deciding whether to accept or deny a request for investigation. We believe, however, that the Minister cannot simply fail to consider the question posed..." He went on to argue that the "Minister has not considered whether an investigation of an alleged contravention – based on the evidence provided – ought to proceed and thereby failed to carry out his statutory obligation under section 77(1) of the EBR."

Counsel for the applicants also argued that the decision merely "recited the obligations of a party under the MCEA without determining or even assessing the evidence submitted by the Applicants." He contended that "this appears to be the central basis for rejecting the Application, and yet it simply recites the obligations of any party under the MCEA." In addition, MOE's decision failed to provide any reference to the MCEA schedules in its consideration of the application even though this was central to the application.

In December 2008, MOE responded to the letter sent by counsel for the applicants but failed to send a copy of its letter to the ECO. MOE suggested in its response that although it did not mention its consideration of the relevant legal issues in its October 2008 response, it had considered them.

In late March 2009, counsel for the applicants wrote to the ECO with additional information. He argued that "the MOE's apparent practice of allowing bureaucratic staff with no apparent training in investigations to make determinations about alleged violations – instead of giving primary, or even substantial, responsibility to the MOE's trained investigators – leads to decisions based on political rather than legal considerations." In addition, he noted that "a proper investigation would likely have turned up key documents that cast doubt on assertions made by the City of Toronto in a related civil proceeding."

Counsel for the applicants also explained that they were required by MOE to make requests under the Freedom of Information and Protection of Privacy Act (FIPPA) but were unable to obtain documents before they filed their EBR investigation and then intervened in the Divisional Court hearing in October 2008. In late 2008, the applicants also made requests for information about the project under the Municipal Freedom of Information and Protection of Privacy Act (MFIPPA). As of late March 2009, these had proved fruitless – the city advised the applicants' lawyer that the relevant officials no longer work for the city and that documents in the possession of the BYBIA and BSBIA – bodies established by city bylaw – are not subject to MFIPPA.

Other Information

In August 2008, a group calling itself the Concerned About Bloor Coalition (CABC) announced it would seek a judicial review (JR) of the city's classification of the project by Ontario's Divisional Court. This JR application was filed several weeks after the city confirmed its classification of the project. In its primary written court submission (factum), the coalition, led by the houseware merchant, William Ashley China Limited, argued that despite the project's broad scope and significant cost, the city classified the project in a way "that is reserved for projects that are limited in scale, having minimal adverse environmental effects, and include a number of municipal maintenance and operational activities." The CABC went on to argue that further study was required and that the project went well beyond a maintenance project. They sought a court order halting the project and requiring the city to undertake further EA studies.

In September 2008, another coalition called the Safe Cycling Coalition (SCC) and comprised of five long-time cycling advocates formed for the purpose of intervening in this case. Two members of the SCC were

co-applicants on this *EBR* investigation application and made reference to the application in their court submissions. In its submissions, the coalition noted that its members collectively have five decades of cycling advocacy experience in Toronto and elsewhere in Canada.

In its court submissions, the city maintained that the project should be classified as Schedule A+ because it is covered by categories 3 and 19 of the MCEA table, "categories relating to the reconstruction of sidewalks within existing rights of way and reconstruction of roads for the same purpose, use, capacity and at the same location."

The city also argued that the CABC members and William Ashley China Ltd. knew about this project for years, and yet did not raise any environmental concerns until after a \$25 million contract was awarded, and construction had started. If the JR application was granted, the project would have to stop for a considerable period of time, which likely would involve at least higher costs, if not the loss of the existing contract. The economic impact and cost to the public of halting the project at this late stage would be substantial.

In late October 2008, Ontario's Divisional Court dismissed the JR application. The court concluded that "the classification of the project was reasonable" and agreed that the project appeared to fit within Schedule A in 2001 and "now fits within the new Schedule A+." The court did not specifically address the discrepancy between the information provided by MOE and the City as to when the classification of the project took place, as described above under "Summary of the Alleged Contraventions." The formal EA sought by the CABC and the SCC was not required. The project "is extensive and expensive work, on a main road in the city, lined by many first-class retail premises. However, explicit in the classification system [in the MCEA] is that the dollar value of the work is not a criterion for A/A+ projects."

The court further ruled that the CABC and William Ashley China Ltd. had unduly delayed raising their concerns about the classification of the project and the Class EA process. The court further noted that granting the JR application would not be in the public interest since the project has been planned for more than ten years and construction had begun.

In the Supplement to our 2007/2008 Annual Report, the ECO reviewed an application requesting that MOE and the Ministry of Municipal Affairs and Housing (MMAH) review the need for new legislation or amendments to the PPS, 2005 under the *Planning Act* for the protection of bicycle couriers and cyclists in general. In discussing that review, the ECO observed "that the focus of transportation planning in Ontario has traditionally been the expansion of the road network primarily for motor vehicles" and that provincial budgets dedicate most of their transportation funding to road expansion, upgrade or maintenance rather than to any other mode of travel (e.g., transit, cycling, or rail). Unfortunately, funding for cycling infrastructure in Ontario constitutes only a very small fraction of the provincial or any given municipal road program. In addition, the ECO noted that the PPS, 2005 statements that "streets should be planned to meet the needs of cyclists does not require municipalities to provide safer cycling networks (i.e., an extensive network of cycling lanes segregated from motor vehicles by curbs or exclusive paths allowing movement throughout most parts of a given city)."

Cycling also provides opportunities to promote individual health and resilience because it affords an opportunity to residents and commuters to exercise. However, some of the health benefits are reduced or even negated when street-level smog levels are excessive. As the ECO documented in our 2007/2008 Annual Report (see pages 57-62) this often is a serious problem, especially during the summer months, in many Ontario communities.

ECO Comment

The primary issue for MOE was determining whether the City of Toronto failed to comply with the MCEA in classifying the Bloor Street Transformation Project under Schedule A (and later A+). In this case MOE decided not to investigate whether a contravention had occurred. Based on the evidence reviewed by the ECO, the ECO believes that MOE's decision not to investigate was a reasonable one. Although this matter could be classified as an ongoing offence, MOE would likely have found it difficult to proceed with

an investigation and prosecution of an alleged contravention related to events that primarily took place five to seven years prior to the filing of the application. Moreover, as noted in the ECO's 2007/2008 Annual Report in the past decade MOE has been moving away from enforcement of the *EAA* and seems to prefer softer tools such as education to promote compliance. Indeed, MOE only has a single compliance officer monitoring compliance with individual EAs in its Toronto office and it is apparent that even fewer resources are dedicated to monitoring compliance with Class EAs.

While the ECO agrees with MOE's overall handling of the application, we are troubled by some of the implications of the application and the MCEA process followed by the City of Toronto. For more than a decade, the ECO has raised serious concerns about consultation processes used for projects approved under Class EAs. In the ECO's 2007/2008 Annual Report, it was noted by ECO staff that they regularly hear from frustrated members of the public about perceived problems and deficiencies with proponent consultation processes and MOE's apparent lack of interest in promoting fairness and adherence to Class EA requirements set out in approval documents such as the MCEA. This application is another graphic example of these problems.

The application also raises broad societal implications related to the issues of accommodation and sharing of public space among Ontarians using various modes of transportation in our communities and on our roads. The ECO agrees with the applicants that the city's interpretation of the MCEA and the consequent determination of its obligations to address and mitigate harm to the environment, as broadly defined under the *EAA* and the MCEA, is a matter of vital importance to cyclists. Moreover, the manner in which the MCEA is applied by municipal staff in Ontario will ultimately determine issues such as the design of municipal roads, and this will have a clear impact on the safety of individuals using bicycles – vehicles that constitute a significant and growing portion of traffic in many Ontario communities.

The Ontario government, through its new planning system and policy statements made under the *Planning Act* and the *Places to Growth Act*, has recognized the importance of promoting alternative transportation modes, including walking, cycling, and mass transit as an important contribution to fighting air pollution and reducing the greenhouse gases that are causing climate change.

Toronto has the potential to become a great cycling city because its topography is fairly flat and its relatively straightforward street grid is accessible and easily understood. However, this potential is unlikely to be achieved in this century if the Ontario government fails to provide leadership and fails to support development of cycling infrastructure.

As noted in the Supplement to the ECO's 2007/2008 Annual Report, most of the decision-making about cycling infrastructure is at the discretion of municipalities. Moreover, most Ontario municipalities have done little more than paint white lines on existing streets and install cycling symbols. Many European cities, as well as Montreal have separately-curbed lanes for cyclists. While Toronto has at least some bicycle paths separated from traffic, much more needs to be done to promote safe cycling in Ontario cities. We urge the Ontario ministries who oversee municipal planning to encourage municipalities and municipal planners to engage cyclists in their deliberations on planning and uphold the spirit of the PPS, 2005.

To facilitate improved planning to promote cycling and walking in Ontario communities, MOE should consider ordering the MEA to prepare modifications of the MCEA. This would be analogous to the changes the MEA made to the MCEA to promote public transit. These were undertaken and approved in 2007. However, they have been largely superceded by the Transit Projects and Greater Toronto Transportation Authority Undertakings Regulation (O. Reg. 231/08) approved in the summer of 2008. (See the ECO's review of the Transit Projects Regulation, O. Reg. 231/08, in this Supplement.)

Was the Consultation Process Adequate?:

The applicants stated that city staff and politicians failed to adequately consult cycling advocates and concerned residents in their deliberations on the project. The ECO agrees that the city could have undertaken a more transparent consultation process in this case and MOE should have dealt with this aspect of the application in more a thorough manner. Some of the problems raised by the applicants

could have been avoided, in part, if the MCEA had a requirement that municipalities publicize the classification of all MCEA projects. In this case, the city failed to disclose that the project was a Schedule A+ project until about four months before construction was supposed to begin. This lack of transparency is highly problematic and probably partially explains why the CABC felt it was necessary to apply for a judicial review. The ECO urges MOE to review these provisions of the MCEA and also consider ordering appropriate amendments.

This application also illustrates how difficult it can be for members of the public to gain access to EA approval documents and to learn what approval documents might exist. The ECO has noted this problem in past reviews of *EBR* applications. Since the applicants were forced to make requests for several project documents under *FIPPA*, and MOE was unable or slow to provide them, they could not obtain relevant documents before they filed their *EBR* investigation.

Ongoing ECO Concerns about the Class EA Process:

This application also illustrates a number of systemic weaknesses in the Class EA process. Some of these problems have been described in past ECO Annual Reports and will be familiar to regular readers of ECO reports. This review suggests that MOE does not have the resources to properly monitor the large number of Class EA approvals being issued under the *EAA*. This application also highlights that MOE staff need better training and information about the nuances of the MCEA and other Class EAs. It is apparent that MOE provided the public with incorrect information about the MCEA and the *EAA* on a number of occasions.

In addition, this review shows that MOE continues to rely on a complaint-based compliance model and that the ministry is reluctant to prosecute proponents for failures to comply with the terms of approvals under Class EAs and the EAA. The ECO urges MOE to develop an enforcement policy that applies to alleged contraventions of the EAA.

Review of Application I2008009:

6.1.5 Alleged *EPA* Section 14 &15 and *OWRA* Section 30 Contravention re: Cameco Pipeline in Port Hope (Investigation Denied by MOE)

Geographic Area: Port Hope

Background/Summary of Issues

Background:

In August 2008, the applicants filed an application for investigation that requested the Ministry of the Environment (MOE) investigate alleged contraventions of the *Environmental Protection Act (EPA)* and *Ontario Water Resources Act (OWRA)*. The applicants contended that Cameco Corporation, located in Port Hope, Ontario, contravened section 14 of the *EPA* and section 30 of the *OWRA* as a result of the discharge of effluent into Lake Ontario from the water collection/treatment system of the Welcome Waste Management Facility (WWMF). Furthermore, the applicants alleged that Cameco is in violation of the spill reporting requirement under section 15 of the *EPA*.

Cameco owns and operates the WWMF, which is a low-level radioactive waste management facility in Welcome, Ontario, west of Port Hope. The approximately three kilometre long pipeline was installed in 1957 to drain untreated leachate from the Welcome facility into Lake Ontario.

All works and undertakings related to uranium fall under federal jurisdiction as set out in the *Constitution Act, 1867.* The WWMF operates under a Waste Nuclear Substance Licence issued in 2002 by the

Canadian Nuclear Safety Commission (CNSC). The federal *Nuclear Safety and Control Act* provides the CNSC with its regulatory authority. The CNSC regulates the use and transport of nuclear energy and materials and disseminate information on their effects on the environment and public health and safety.

Under the Port Hope Area Initiative, a community-initiated environmental remediation project led by federal agencies with input from MOE and affected municipalities, Cameco is converting the WWMF to a long-term waste management facility. In addition to the 620,000 cubic metres of waste currently at the site, an additional 773,250 cubic metres of low-level radioactive waste will be moved to the site as part of the conversion to better manage waste. The intention is to transfer ownership of WWMF from Cameco to the federal Low-Level Radioactive Waste Management office of Atomic Energy of Canada Limited.

The pipeline between the WWMF and Lake Ontario is largely buried underground with the terminal end of the pipeline located approximately 20 feet offshore and held to the bottom of the lake by concrete slabs. However, in the spring of 2008, it was discovered that the terminal end of the pipeline had been severed after a harsh winter and was discharging leachate onto the beach.

The EPA and OWRA:

Section 14 of the *EPA* prohibits a person from discharging or permitting the discharge of a contaminant into the natural environment that may cause an adverse effect. Where a discharge of a contaminant occurs, the person who discharges or causes the discharge is obligated under section 15 of the *EPA* to notify MOE. Under section 30 of the *OWRA*, a person is guilty of an offence if they discharge or cause the discharge of a material in any waters or their shores that may impair the quality of the water.

The applicants alleged that Cameco is responsible for the operation of the pipeline and the contaminants it releases into the natural environment. They contended that the pipeline has been neglected by Cameco, citing that the property owner with the only access point to the pipeline has not been contacted by Cameco for at least five years. As a result of the breakage of the pipeline, the applicants stated that its location changed resulting in the discharge of effluents on the lake surface, and not in the normal course of events. Moreover, the discharge was not authorized by the government of Ontario.

The applicants also alleged that the contaminants in the discharge are likely to have adverse effects and may impair Lake Ontario, harm local residents, and limit their enjoyment of nearby property. Samples of the effluents taken by the applicants indicated the presence of arsenic and uranium at levels exceeding the Provincial Water Quality Objectives (PWQOs). The applicants noted that the CNSC licence does not regulate the discharge of uranium. The applicants' test results for arsenic in the discharge from the Welcome site were "between 3.14 and 11 times higher than the interim PWQO for arsenic." Their tests showed uranium to be "between 5.2 and 49.2 times higher than the applicable interim PWQO."

Environmental and Health Concerns:

The applicants are concerned that contaminants present in the effluents threaten the safety of local residents' drinking water supplies. Local residents draw water for personal use and consumption from Lake Ontario in the vicinity of the pipeline. Additionally, the intake pipe for Port Hope's municipal water treatment plant is only five kilometres from the pipeline discharge. Four houses along the pipeline draw their drinking water from wells, and there is concern that the 50 year old pipeline may be leaching contaminants into the soil and the groundwater supplying these wells.

The area in the vicinity of the pipeline was traditionally used for recreation by area residents. Prior to the summer of 2008, the beach where the discharge was occurring was used for hiking and swimming, however, many residents no longer feel the beach is safe for aquatic-related activities after learning of the discharge. As such, the applicants asserted that many residents have experienced the loss of enjoyment of the normal use of their property.

The applicants also note that Brand Creek empties into Lake Ontario near the pipeline. The creek is the nesting site for water fowl including loons and the great blue heron. The area is also frequented by beavers, coyotes, deer and foxes.

Ministry Response

In October 2008, MOE denied the application for investigation. MOE stated that CNSC has advised the ministry that "it is taking regulatory action to have the licensee, Cameco Corporation, undertake a comprehensive technical assessment of the WWMF."

CNSC has set out an Action Plan for Cameco and requested that the company provide a report and work plan indicating how it will address each measure in the Action Plan. The comprehensive technical assessment is to include a full characterization of the discharge effluent, and an effluent design evaluation that incorporates a review of the current treatment system and a review of additional treatment options. CNSC has also requested Cameco to conduct an evaluation of the level of risks to human health and the environment in a Human Health and Ecological Risk Assessment, and to create a plan to address the evaluation's conclusions.

In the short-term, CNSC has requested Cameco to restore the effluent discharge pipe in Lake Ontario as a submerged outfall configuration prior to the 2008 winter season.

MOE stated it will assist CNSC by providing technical advice on Cameco's submissions, and ensuring the facility's operations, including the treated water effluent discharge criteria, are protective of the natural environment and human health. MOE will also make sure that future licensing requirements take into consideration the PWQOs.

MOE also noted that the Port Hope municipal water plant was inspected in May 2008 by the ministry's Drinking Water Management Division. The inspection confirmed that the treated water quality continues to meet the requirements of the Ontario Drinking Water Quality Standards as established under O. Reg. 169/03 under the *Safe Drinking Water Act (SDWA)*.

MOE explained that PWQOs are used to assess the impact of discharges on the aquatic environment and are not end-of-pipe discharge criteria. As outlined in Table 1, Cameco sampling in 2007 and CNSC sampling in August 2008 indicated that the treated water effluent concentrations met the federal license requirements for arsenic and radium-226. While the arsenic concentrations exceeded the provincial interim PWQOs they met the established PWQOs (note: Interim PWQOs are established when there is insufficient toxicological information available to prepare an established PWQO). Uranium concentrations exceeded the interim PWQOs (no limit for uranium was set in the license). Radium-226 concentrations were lower than the PWQOs. MOE concluded that the discharge effluent "does not pose a concern to aquatic biota as there are no significant exceedances of PWQOs and biological testing has confirmed that the effluent is not acutely lethal and that there is no significant chronic toxicity."

Table 1: Summary of Government Sampling Results

Contaminant	WWMF	PWQOs	Cameco's	CNSC Samples
	License Limits	Established/Interim	Samples 2007	August 2008
Arsenic	0.5 mg/L	Established: 0.100 mg/L;	Up to 0.04 mg/L;	0.023 and 0.036
		Interim: 0.005 mg/L	Average of 0.008	ml/L
		J J	mg/L	
Radium-226	0.37 Bq/L	1 Bq/L	Below analytical	0.02 and 0.04
		·	level of detection of	Bq/L
			0.055 Bq/L	
Uranium	Not in License	Interim: 0.005 mg/L	Up to 0.350 mg/L;	0.110 and 0.110
		_	average of 0.190	mg/L
			mg/L	

MOE concluded that in light of the effluent concentrations and discharge rates, the dilution factor of Lake Ontario, and the distances to municipal water supply intakes, there is "no concern for potential impacts to municipal water supply systems for communities along the shores of Lake Ontario." CNSC's preliminary evaluation of risks to human health and ecological receptors also concluded that risks due to acute exposures to effluent do not pose an immediate concern.

ECO Comment

The ECO is satisfied with MOE's rationale in its decision to deny the application. The ECO is pleased that MOE worked with the CNSC to address the environmental concerns raised in the application for investigation. In particular, the ECO is encouraged that both short-term and long-term initiatives have been outlined to ensure waste from the Welcome facility does not adversely affect water quality near the pipeline. The ECO believes it is vital that MOE uphold its pledge to continue working with CNSC in its assessment of the WWMF, and to monitor and evaluate water quality surrounding the facility to ensure contaminants do not exceed provincial requirements.

The multi-jurisdictional regulatory oversight of nuclear facilities is confusing to the public. The federal license for the WWMF covers some contaminants emanating from the facility but not all contaminants found in the effluent. The pipeline discharges into Lake Ontario, and both PWQOs and drinking water standards regulated under the *SDWA* must be considered by MOE. The situation at the Welcome facility demonstrates the complexity of addressing nuclear concerns and further emphasizes the importance of federal-provincial cooperation. It is imperative that the province ensure that this environmental problem does not fall through an inter-jurisdictional gap, and that the province actively ascertains that the federal actions undertaken meet provincial standards.

This application is a good example of how the public can use the *EBR* to raise an important environmental concern, which in this case resulted in the province working with the federal government to respond to the concerns raised in the application.

One issue that was not directly addressed in MOE's decision was whether the level of contaminants present in the lake erodes its suitability for recreational use. It is understandable that the public is anxious over the discharge of radium, arsenic and uranium into local waters. Residents would benefit from a clear statement by MOE regarding the safety of the affected waters for recreational use.

The ECO encourages MOE to make publicly available the progress of the treatment of the pipeline effluents related to the management of radioactive material in the Great Lakes basin. Information stemming from the Cameco action plan should be made public to allow residents of the affected area to monitor and provide input on projects, and to facilitate greater understanding and cooperation between both governments and the residents.

Review of Application for Investigation I2008010:

6.1.6 Septic Systems near Blind River: Source of Alleged Contravention of the *Ontario Water Resources Act*, Section 30(1)

(Investigation Denied by MOE)

Geographic Area: Blind River, Sault Ste. Marie

Background/Summary of Issues

In October 2008, two applicants filed a request for investigation alleging that contraventions of the *Ontario Water Resources Act (OWRA)* were occurring on Lake Matinenda (the "Lake"), located near the Town of Blind River Ontario, and about 125 kilometres east of Sault Ste. Marie, Ontario. Specifically, they alleged that many cottages on the Lake have faulty, antiquated and non-permitted septic systems which are leading to illegal discharges into the waterbody. Further, they questioned why the Town of Blind River and the Algoma Public Health Unit ("APHU") was permitting the discharge of untreated sewage into surface and ground water supplies (and alleged that the APHU was contravening section 30(1) of the *OWRA*).

The Ministry of the Environment (MOE) is responsible for enforcing the *OWRA*. Small onsite septic systems are regulated in Ontario by O. Reg. 350/06 – Building Code ("Building Code") under the *Building Code Act, 1992 (BCA)*. This Act and regulation are administered by the Ministry of Municipal Affairs and Housing (MMAH). In the late 1990s, MMAH delegated regulatory authority for permitting and inspecting of small onsite septic systems to local enforcement agents (i.e., a board of health, planning board or conservation authority). Prior to this MOE had responsibility for small onsite septic systems under the *Environmental Protection Act*.

To qualify their principal allegation, the applicants provided a list of very specific complaints and alleged contraventions of the *BCA* and Building Code on Lake Matinenda. The applicants alleged that APHU is involved in the following:

- 1) Not following up on specific complaints.
- 2) Designing unsafe septic systems, contrary to the Building Code minimum requirements, along with passing inspections and plan reviews of their own design.
- 3) Designing undersized septic systems which are non-compliant with minimum requirements of the Building Code regarding occupant load, sewage flows, fixture units, and existing soils.
- 4) Allowing new non-compliant septic systems to be installed in contact with groundwater, in flooded low lots and creek beds, and situated less than the minimum required clearance distances from groundwater sources, bedrock and impermeable soils.
- 5) Allowing direct sewage discharges, untreated, into surface water and groundwater which are also sources of drinking water supply.
- 6) Allowing occupancy of new buildings without required septic system completion. (The applicants also identified the Town of Blind River building department in regard to this allegation).
- 7) Referring cottagers to non-registered, nonqualified contractors to do installations of unsafe septic systems, contrary to the Building Code.
- 8) Employing nonqualified summer students, without proper supervision, to carry out on-site inspections based on specific complaints regarding septic systems.
- 9) Not ensuring proper sewage systems site inspections.
- 10) Designing for class 2 septic systems that do not meet Building Code minimum requirements for loading rates to soils.

Furthermore, the applicants described the design of some septic systems on the Lake as old rotted steel drums, some in use, some not. They noted that these systems continue to leach into creeks and groundwater and that most have no leach pads beyond the drum. They alleged that APHU refuses to do dye tests (a means of determining whether septic systems are functioning properly) on these older septic systems and is not realistically recognizing the risk these systems pose to water quality.

According to the applicants, the municipality of Blind River and its enforcement agent the APHU, have received complaints of this nature for the past 20 years and have not adequately responded. Since at least 2006, the applicants have corresponded extensively with a number of environment and health ministries, agencies and municipal and professional bodies. This correspondence was included in the application. The applicants sent letters to the Town of Blind River, the APHU; the Matinenda Lake Cottage Association; the Ontario Onsite Wastewater Association; MMAH; MOE; the Ministry of Health and Long Term Care (MOHLTC); the Ontario Ombudsman; and with this application, the Environmental Commissioner of Ontario (ECO). The applicants also provided in their application: test results of water samples taken by the Matinenda Lake Cottage Association; examples of septic system permits and applications; and photographs of what was regarded as poor septic system design, operation and practices.

The applicants received correspondence from these various government agencies and ministries which was also included in the application. For example, APHU reported undertaking a survey of 50 lots on the Lake in 2007, after which corrective action was taken by eight cottage owners to repair or upgrade their septic systems. APHU also informed the applicants that it does not have the financial resources to carry out all of the remedial work sought by the applicants. This work would entail hiring staff, carrying out reinspections, conducting tests and assessments, processing results, and conducting follow-up to ensure

septic systems on the Lake are brought into compliance. The APHU's land control program (of which septic systems are a part) is operated on a user fee basis – like many others in the province.

The APHU also cited logistical and expertise shortfalls concerning septic system inspection and repair on Lake Matinenda. The Lake is accessible only by boat, not road. The barges available for the Lake are capable of transporting only small amounts of supplies at a time.

The applicants also filed responses to their letters that were sent by provincial ministries. MOE explained in a 2007 letter that the Town of Blind River does not fall under a Watershed Protection Planning Program under the *Clean Water Act.* This program allows for the protection of municipal drinking water sources within defined source protection areas. Most of these areas are found in southern Ontario.

MMAH wrote to the applicants that amendments to the *Building Code Act*, 1992 passed in 1998 established that the enforcement of onsite sewage provisions is a responsibility of the local enforcement agent, APHU in this instance. This responsibility includes determining which existing systems to inspect and the nature of their assessment. MMAH stated that it does not provide legal opinions as to whether a local enforcement agent has fulfilled its duties under the Building Code or *BCA*, and that anyone concerned about a local enforcement agent not fulfilling its duties may wish to retain a lawyer.

As well, many of the ministry letters referred the applicants back to the APHU (i.e., the alleged contravenor) in order to resolve their concerns.

Ministry Response

In December 2008, MOE denied the application and provided a detailed response to the applicants. MOE noted that it has been collecting water quality data from Lake Matinenda (a large cold water trout-quality lake) from 2005 to 2008 and additional data has been collected by the APHU and the Lake Matinenda Cottage Association. The ministry's data collected between 2005 and 2008 indicated that oxygen levels in the south basin of the Lake are near or better than MNR's criterion for lake trout protection of 7mg/L. Also, the APHU sampling results for *E. coli* – a bacteria associated with human and animal waste – are all below 10 coliform per 100 ml. Of sixteen samples collected across the Lake in June 2007, all were substantially less than the Provincial Water Quality Objective (PWQO) of 108 E. coli per 100 ml of water.

MOE stated that a review of all available historical data related to the allegations of lake water impairment does not suggest significant risks or concerns for the Lake. The Lake's cottage association has been established for several years and has been part of MOE's Lake Partners Program for five years. Data from the Lake Partners Program indicated the Lake to be healthy, with some minor bacteriological impacts, but with no PWQO exceedances or other identified impairments.

The ministry noted the 2007 APHU survey and assessment of private residential sewage systems located on the Lake which targeted high risk private residential sewage systems (resulting in some owners making septic system repairs and upgrades). MOE highlighted that the septic system survey is expected to continue in 2009 and APHU had agreed to share all data collected with MOE. The ministry said it would consider including the results of this study in the evaluation of lake water quality.

Previous MOE Involvement Regarding Complaints about Lake Matinenda Water Quality:

MOE reported that in September 2007, a resident (later applicant) contacted MOE's Sault Ste. Marie Area office with concerns about water quality and private residential septic and sewage system approvals on Lake. A meeting was arranged with the MOE office for September 12, 2007 to discuss the complaints. Concerns about APHU approvals for private residential sewage systems, and allegations of improprieties by the APHU approvals staff were put forward by the resident. MOE informed the applicants of its limited mandate concerning septic systems – it is responsible only for the approval and inspection of large sewage systems, i.e., having a design capacity that meets or exceeds 10,000 litres per day flow. There were no complaints from the resident about large communal systems on the Lake. As a result of the meeting, MOE staff suggested the resident attempt to resolve the issues through APHU. MOE staff also

agreed to bring forward and discuss the resident's concerns at an upcoming semi-annual meeting with APHU staff.

MOE reported that on October 25, 2007 MOE staff met with APHU staff and raised the resident's concerns about private septic and sewage systems on the Lake. APHU staff indicated that they were aware of the complaints and would arrange to conduct another survey of the septic systems on the Lake. MOE committed to using the results of the completed survey to inform the development of MOE's water quality survey of the Lake in 2009.

Ministry Summary:

The ministry indicated it regards the allegations raised in this *EBR* application for investigation as serious, but determined that most of them did not fall within the authority of the MOE or the *OWRA*. Staff of MOE's Environmental Bill of Rights Office recommended to the ECO that the matters of improper enforcement of the *BCA* be referred to MMAH for follow up. MOE added that the potential for water quality degradation is within the scope of the MOE review of the alleged contravention under section 30(1) of the *OWRA* referred to by the applicant in the application for investigation.

MOE's review of all available historical data on lake water impairment does not suggest significant risk or concerns for the water quality of this Lake. MOE staff have been involved in sampling at the Lake since 2005 in order to provide a current assessment of lake capacity. MOE added that these data are under evaluation and once completed, a report on developmental impacts at the Lake will be issued.

ECO Comment

The ECO believes that MOE had a valid reason for denying this application – since 1998 the ministry has not been directly responsible for approving and monitoring small onsite septic systems. Faulty or deficient septic systems were at the root of the applicants' concern over water quality in the Lake. Authority for onsite septic systems was transferred to MMAH in the late 1990s. MOE retained authority over larger communal septic systems, but these were not the basis of the concerns cited by the applicants.

MOE advised the applicants that it had recommended to the ECO that matters in this application be forwarded to MMAH for follow up. Unfortunately, neither MMAH nor its legislation is subject to *EBR* investigations because MMAH's laws are not prescribed under O. Reg. 73/94. MOE also indicated that an "investigation" is ongoing, but was referring to the Lake's survey work; the ECO believes this work cannot be considered comparable to an "investigation" as intended by the *EBR*. Lake Matinenda is part of MOE's Lake Partners Program and thereby undergoes sampling and testing, but this does not represent an investigation of probable faulty septic systems. MOE also referred to the "survey and assessment" conducted by the APHU in summer 2007, in which 50 lots were assessed, resulting in eight owners making repairs or upgrades. This action is welcomed, but does not qualify as an investigation and is closer to an inspection.

MOE told the applicants that the potential for water quality degradation is within the scope of the MOE review of the alleged contravention under *OWRA*, section 30(1). But MOE did not clearly explain why this provision of the *OWRA* could not be exercised in this instance; namely, that the Lake's data do not show evidence of water quality impairment. The ECO believes MOE should have clarified this point. It is unclear to the ECO whether MOE considered using dye tests on individual septic systems to check for adverse effects on the Lake's water. This approach has been used in the past.

Old Septic Systems:

According to the applicants, the Lake hosts a number of cottage properties with antiquated septic systems – some dating back to a period when approvals for septic systems may not have been required or sought by many cottagers. MMAH has produced a guidance document for local enforcement agents that are considering establishing a re-inspection program. The document identifies probable high risk septic systems as those that are 20 years or older, those that have not been re-inspected, and those that

have no record of an approved sewage system. According to the applicants, many high risk systems remain, despite the survey operations conducted by the APHU.

Proposal for a Septic System Inspection Program:

The ECO contacted MMAH in 2009 about onsite septic system inspection activities. In March 2008, MMAH proposed amendments (see *EBR* Registry Number 010-3036) to the section of the Building Code pertaining to onsite sewage systems. The proposed amendments would introduce requirements for maintenance inspections (or re-inspections) of existing onsite sewage systems. This proposal, working in tandem with MOE's *CWA* program, will fulfill a recommendation made in 2002 by the Walkerton Commission of Inquiry. MMAH's proposed amendments would also establish technical requirements for tertiary treatment unit disposal beds ("area beds") that form part of certain onsite sewage systems. The ECO regards this proposal as a welcome development and a much needed initiative. However, this initiative may be of little assistance to the applicants as the target of the proposed regulatory amendments is vulnerable areas identified in a source protection region. Lake Matinenda does not lie within a source protection region. As well, MMAH has not proposed funding for this initiative. Funding will presumably need to be found from within the permit fee based system that exists for onsite septic systems. Funding for inspection and re-inspection is one of the key constraints for the APHU. As of spring 2009, MMAH had not made a decision on this proposal.

Summary:

In the late 1990s, the ECO expressed concern about the transfer of authority for small onsite septic systems from MOE to MMAH. This transfer arose from recommendations of the Who Does What Advisory Panel and legislation at the time (*Bill 152, Services Improvement Act*). The goal of the transfer was to shift to a "one-window" approach for smaller construction and building approval projects. The outcome of these initiatives included transferring authority for small onsite septic system permitting, inspection and re-inspection to local enforcement agents. At the time, the ECO noted that the decision was environmentally significant because of the numerous environmental problems caused by thousands of malfunctioning septic systems across Ontario annually; and the concern that most municipalities were unlikely to have adequate investigation and enforcement capabilities to deal with the threats posed by improperly functioning septic systems.

MMAH needs to move forward on improvements to its handling of small onsite septic systems under the *BCA* and Building Code. As of early 2009, the Building Code sets no clear requirements for municipalities or local health units to carry out mandatory septic system re-inspections. Further MMAH suggests no new funding mechanism to carry out the proposed mandatory re-inspections. Municipalities can be reluctant to impose the costs of an inspection program, as well as the resulting costs of potentially expensive septic system upgrades on local ratepayers. Not surprisingly, it is estimated that only about 20 Ontario municipalities have re-inspection programs. MMAH's proposal on the Registry is a step forward, but it will not include in its reach many lakes across Ontario, including Lake Matinenda. The ECO believes that a comprehensive program of septic system inspection and re-inspection would be far preferable to the slow, but inexorable water quality impairment of thousands of cottage lakes across Ontario.

Review of Application I2008011:

6.1.7 Alleged Contraventions of the *Environmental Protection Act* at the Oshawa Landfill/Application for Investigation of Rossland Acres Inc.

(Investigation Undertaken by MOE)

Background/Summary of Issues

On October 27, 2008, the applicants requested that the Ministry of the Environment (MOE) investigate a possible leachate leakage at the former Industrial Disposal (Oshawa) Limited landfill site, now owned by

Rossland Acres Inc. They provided evidence in the form of photographs, showing that over the spring and summer of 2008 an orange-coloured liquid was seeping from the ground on the south-facing side of the site, which has been closed since 1985. They also provided test results for three sets of soil and water samples taken from the affected site over this period of time. The tests revealed levels of several contaminants above both national and provincial guidelines for both soil and water. The applicants argued that the discharges had impaired the quality of the natural environment and might have also rendered the property, plants and animals unfit for human use. They also pointed out that the site is in close proximity to a residential development and that many people walk their dogs in the area. The applicants alleged that the owner of the site was in contravention of the *Environmental Protection Act (EPA)* in two ways: first, by allowing the discharge of a substance into the environment that may be causing an adverse effect; and secondly, by failing to report this discharge to MOE.

Ministry Response

After reviewing the application, the ministry decided on January 3, 2009, to investigate. The investigation included further testing of samples collected from the site by the owner, testing of samples taken from Harmony Creek (which flows just south of the site) by the ministry, and meetings with the owner on the site to examine the leachate discharges and discuss remediation measures. The ministry concluded that their investigation did not indicate that the discharge was causing or could cause an adverse effect and that the owner was not in contravention of the *EPA*, either for allowing the discharge or for failing to report it to MOE. The ministry also stated that although no offence had been committed, it recognizes the significant concern regarding this issue and will therefore carry out the following activities: a comprehensive examination of the company's compliance with the requirements of their provisional Certificate of Approval (C of A); surface and groundwater sampling at the site and surface sampling of Harmony Creek; and continued communication with the company to ensure that the latter takes action with respect to mitigating any risks associated with the seepage, repairing the seepage, and addressing its source.

ECO Comment

MOE has promised to report back to the applicants in three months (July 2009) with the results of these further investigations and activities. The ECO will be monitoring this case and will review the outcome of this application for our 2009/2010 reporting year.

Review of Application I2008012:

6.1.8 Alleged Contravention of Section 14 of the *EPA* re: Black Soot Discharges in the City of Hamilton

(Investigation Denied by MOE)

Geographic Location: Hamilton

Background/Summary of Issues

In November 2008, two applicants requested an investigation by the Ministry of the Environment (MOE) of alleged discharges (or "fallouts") of black soot and particulate matter from three large industries in the City of Hamilton. The applicants, one of which was the City of Hamilton, allege that hundreds of the city's residents "are experiencing a loss of enjoyment of their properties as a result of the black soot from the discharge." The applicants allege that one or more of the three companies have contravened section 14(1) of the *Environmental Protection Act (EPA)* (discharging a contaminant into the natural environment that causes an adverse effect).

Background:

For several years, the residents of northeast Hamilton have complained that repeated fallout events (generally involving the deposition of fine black airborne particles) have caused damage to property and negatively affected their quality of life. In the mid-1990s, one survey found that almost 75 per cent of the over 400 polled residents of northeast Hamilton had experienced disruptions in lifestyle due to deposits of black sooty material. Many frustrated citizens have called on MOE to identify and prosecute the responsible local industries. Officials of the City of Hamilton have also received numerous calls and complaints about these events.

During the summer of 2006, complaints of extreme black fallout events led MOE to sample residential properties, inspect industries, and produce a report on the fallout events. Although the report was unable to definitively ascribe the incidents to any one emissions source, it did conclude that the events could be attributed to the three industries in the north end of Hamilton (i.e., ArcelorMittal Dofasco, Columbian Chemicals, and Stelco Steel). Since 2006, incidents of sooty deposits have continued to affect residents of northeast Hamilton. After analyzing dust samples from one such event in February 2007, MOE blamed Dofasco and Stelco Steel and requested that the companies submit reports on how to manage the problem.

Alleged Contraventions of the EPA:

Throughout 2008, Hamilton residents and media observed multiple incidents of air discharges from local industries. As evidence that the three companies named in the application were responsible for discharges, the applicants provided photographs, articles and written observations that were published in the local media and posted on community websites. The applicants asserted that local media reports indicate that discharges took place on at least 16 dates in 2008, and that these discharges have caused "adverse effects" as defined in subsection 1(1) of the *EPA* (e.g., impairment of the quality of the natural environment; injury or damage to property; loss of enjoyment of normal use of property; and harm or material discomfort to any person).

While they acknowledged that many of the discharges had already been reported by the companies to MOE, the applicants argued that reporting after the fact fails to address the problem. The applicants stated "[t]he failure of [MOE] to resolve this matter and to make the contraveners accountable for their actions/inaction is of serious concern to the City of Hamilton and to members of the public." Moreover, they emphasized that "[t]his matter is one of long duration and of significant public interest and therefore, must be resolved."

Ministry Response

In January 2009, MOE denied the application for review, stating "these matters are either currently under active investigation by the ministry's Investigations and Enforcement Branch (IEB) or have been investigated by the ministry's Hamilton District Office and closed." MOE reasoned that conducting a second investigation while one is already underway for the same issues is a duplication of efforts, which is a permitted reason under the *EBR* for declining to undertake an investigation.

MOE informed the applicants that MOE's standing operating procedure for all discharge incidents/complaints related to black soot is to identify the source, identify the impacts, and determine whether information exists to support that a violation occurred and that the incident should be referred to the IEB. MOE stated that there are currently ten active IEB investigations taking place in response to the 16 dates referenced in the application. MOE's decision summary provides details as to the ministry's actions for each discharge event.

In response to the discharge events and black sooty fallouts, MOE stated in its response letter to the applicants that it has also:

- Advised all three companies of the need for improvement;
- Issued a number of orders to ensure actions are taken in a timely manner to identify and solve the problems which gave rise to fallout events;

- Issued legal notices that require two of the companies to carry out full air quality and technology assessments for a number of contaminants (including particulate matter), which will lead to the development of an overall plan to reduce emissions;
- Hired three additional inspectors to increase MOE oversight of Hamilton industrial emitters;
- Implemented a 24/7 procedure to respond to fallout complaints and notifications; and
- Engaged key stakeholders and outlined mitigation plans at a City of Hamilton special council session.

The ministry stated that it will "[c]ontinue to inspect companies both proactively and reactively to ensure that companies follow through on commitments to identify problems and improve operations."

Other Information

In late January 2009, ArcelorMittal Dofasco alerted Clean Air Hamilton (a multi-stakeholder group dedicated to improving air quality in Hamilton's community) and other local organizations that the unexplained collapse of an air pollution control duct in one of its coke plants could result in smoky, black emissions over the succeeding weeks. MOE stated that it would monitor the situation closely and consider further investigation and prosecution if the company strayed from procedures stipulated in a ministry order to minimize emissions. The company was also required to report to MOE by the end of March 2009 on why the duct failed and produce a contingency plan by May 2009 for dealing with similar failures on all its ovens.

ECO Comment

The ECO believes that MOE's rationale for denying this investigation is valid; the ministry was already well aware of and investigating the ongoing problem of black sooty fallouts in Hamilton, as well as the 16 discharge incidents/complaints reported in the application.

Nevertheless, the ECO appreciates the extreme frustration that the City of Hamilton and its residents must have with this chronic pollution problem and we urge MOE to take the steps necessary to resolve it. For over a decade, the quality of life, and likely health, of residents of northeast Hamilton have suffered as a result of repeated fallout events. And while persistent complaints and extensive media coverage have led MOE to investigate the issue, collect and analyze fallout samples, implement a response procedure, and order companies to improve emissions, this issue still appears to be unresolved.

The ECO acknowledges that determining the source(s) of Hamilton's black sooty fallout events is not easy. This is a complicated problem that likely involves multiple sources and confounding factors. Although the ECO recognizes the measures MOE has implemented in response to discharge events, particularly the issuance of orders and hiring of additional inspectors, and we look forward to learning the results of the IEB investigations, we believe the exceptional complexity of this long-standing problem requires the ministry to produce an exceptional solution. To monitor the sources of fallouts, the ECO encourages the ministry to consider the use of additional technologies, such as the installation of nephelometers (instruments for measuring suspended particulates) throughout Hamilton's industrial area. Even more importantly, the ECO urges MOE to implement a comprehensive and effective abatement program to bring this inexcusable situation to an end.

For information on an application for review related to Hamilton's air quality and black sooty fallouts, please see pages 142-146 of the ECO's 2007/2008 Annual Report.

Review of Application I2008013:

6.1.9 Alleged Certificate of Approval Contraventions at the Taro East Landfill Site (Investigation Denied by MOE)

Geographic Area: City of Hamilton, Stoney Creek, Niagara Escarpment

Background/Summary of Issues

Philip Services Inc. (PSI) obtained approval on September 6, 1996 from the Ministry of the Environment (MOE) to begin using the Taro East Quarry as a landfill site for solid non-hazardous industrial, commercial and institutional waste. The former limestone quarry is located on the Niagara Escarpment in, at the time of the approval, the City of Stoney Creek. As required by its Certificate of Approval (C of A) No. A181008, PSI established and funded a community liaison committee (CLC) that included representatives from the community and the City of Stoney Creek. A Terms of Reference (ToR) was drafted and the CLC began meeting early in 1997. Since then the ownership of Taro has changed twice, the CLC has been disbanded and re-established twice, and the City of Stoney Creek has amalgamated with the City of Hamilton.

The applicants alleged that the first two owners of the Taro East Landfill Site ("Taro") contravened the following six CLC conditions in the Taro C of A and that these contraventions were on-going until the summer of 2008 when a new CLC was established by the new owner, Newalta Industrial Services Inc. (Newalta).

- 1) Condition 70 required PSI and the then City of Stoney Creek to establish a CLC within 120 days of issuance of the C of A. The purpose of the CLC was to provide community review of the development, operation, ongoing monitoring, closure and post-closure care of the landfill site. The applicants alleged that Taro operated without a CLC from 1997 until 2008 and that a replacement CLC established in 2004 was never recognized by MOE, the City, or the community.
- 2) Condition 71 outlined the general mandate of the CLC as "review and provide recommendations on the annual operating and monitoring reports and ... on the complaints and complaint handling protocols and on any other matters of concern to the community." Since Condition 70 was contravened, the applicants alleged that this condition must also have been contravened.
- 3) Condition 72 outlined the membership, including municipal representation, of the CLC. Since this condition was never amended to reflect changes in the structure of the local government that took place in 2000 due to amalgamation, the applicants alleged that it would have been impossible to comply with this condition.
- 4) Condition 73 required PSI to allow the CLC to prepare its own Terms of Reference (ToR) and submit it to the Regional Director, MOE and to make it available to the community. According to the applicants, PSI never allowed the CLC to "properly document" its ToR and there is no evidence that it was ever presented to MOE or made public. The applicants advised that the landfill site has operated without a valid ToR from the summer of 1997 until the summer of 2008 when a "truce" was reached with the new owner, Newalta. A local newspaper reported that the new CLC would be holding its first meeting in September 2008.
- 5) Condition 74 required PSI to provide a maximum of \$10,000 annually to support the operation of the CLC. The applicants explained that there is a loophole in this condition since

- no minimum level of funding was specified. The applicants alleged that this condition was contravened when PSI stopped all funding in 2002.
- 6) In response to ongoing concerns regarding the CLC, MOE added Condition 103 to the C of A in September 2002. This amendment required PSI to arrange for a member of the Environmental Review Tribunal (ERT) to lead the development of a revised ToR for the CLC. The appointment was to be made within one month. MOE noted in the amendment that it was "in the public interest for PSI to participate in a public process with a third party who has environmental expertise." The applicants alleged that PSI ignored the deadline and advised that they were unaware of the status of this condition. (The ECO notes that the ERT revoked the condition in 2003. MOE removed the condition from the C of A on April 16, 2008.)

The applicants supported their allegations with newspaper articles, correspondence with MOE and the report "Final Report: Taro East Landfill Expert Panel" dated October 2000.

Other Information

Some members of the community have had concerns about Taro since the original study group, comprised of local citizens, the City of Stoney Creek and others, supported the conversion of the former quarry into a landfill site. These concerns were aggravated when MOE decided against holding a hearing prior to approving PSI's C of A in 1996. Tensions rose in 1998 when PSI was accused by the public and MOE of illegally burying "hazardous" waste at Taro. The waste, which had been classified as hazardous in Michigan, had been treated at a plant in Hamilton rendering it non-hazardous in Ontario. Under Michigan law, the treated waste would still have been classified as hazardous; whereas, in Ontario under R.R.O. 1990, Reg. 347 General – Waste Management, made under the *Environmental Protection Act* ("Regulation 347"), the treated waste was no longer classified as hazardous. MOE later admitted that the treated waste was not hazardous. As a result of this incident, PSI filed two multi-million dollar lawsuits against MOE and MOE amended Regulation 347 in September 1999 to state that treated hazardous waste was still hazardous unless it was de-listed or exempted. For additional information, refer to the Supplement to the 2000/2001 Annual Report, pages 60-68.

CLCs have been used from time to time over the last 25 years to improve communication and foster positive relationships between proponents of landfill projects and the community. In 1994, MOE published the "Public Consultation Guide" ("the Guide") in which it discussed the roles and responsibilities of public committees and proponents, selection of committee members and the importance of on-going informal communication between committee members and their constituencies. MOE also provided some financial support for the committees. The Guide is no longer generally available and its status is unclear. For additional information, refer to the Supplement to the 2006/2007 Annual Report, pages 154 and 157.

A CLC at another landfill was also the subject of an application in 2006. The applicants alleged that the County of Simcoe had "demonstrated a pattern of disregard" for the role of the community monitoring committee and had "attempted to control and curtail" and/or exclude the committee from participating in key decision-making related to the Site 41 landfill. In our comments on this application, the ECO recommended that MOE clarify the roles of these committees through amendments to the relevant legislation and to consider government funding for the activities of these committees. For additional information, refer to the Supplement to the 2006/2007 Annual Report, pages 152-157.

Ministry Response

MOE denied the application explaining that non-compliance with the conditions related to the CLC is unlikely to harm the environment, noting that many landfill operations do not have CLCs. MOE also noted that the first two owners are no longer in existence and that the new owner, Newalta, has complied with all of the CLC conditions in its C of A. MOE explained that, although Newalta inherited the C of A held by the previous owner, it could not be held accountable for any alleged non-compliance with the C of A by the former owners.

MOE advised that, after working with Newalta and the City of Hamilton on a revised ToR for the CLC, substantive amendments were made to the CLC conditions in the C of A on April 16, 2008 and the revised TOR had been appended to the C of A as a schedule.

In its response to the applicants, MOE cited section 77(2) of the *Environmental Bill of Rights* (*EBR*) which states that a minister is not required to undertake an investigation if the alleged contravention is "not likely to cause harm to the environment."

ECO Comment

The ECO agrees with MOE's decision not to undertake this investigation. When the application was submitted, the applicants acknowledged that under Newalta the situation appeared to be improving and that their allegations applied to the former owners. Since none of the allegations or evidence provided suggested any previously unknown threats to the environment, the ECO agrees with MOE's statement that failure to investigate these allegations will not result in harm to the environment. The ECO, however, is quite concerned that CLCs continue to be a source of significant contention in a number of communities. The requirement to establish CLCs was based on the understanding that ongoing consultation would foster constructive relationships between the proponent of the landfill site and the community. Instead, CLC meetings have become venues of acrimonious debate allowing community concerns about landfill operations to fester interminably. The ECO strongly urges MOE to develop guidance material as recommended in 2007 that will assist proponents and the community in establishing functional CLCs and in fostering appropriate expectations of CLCs.

6.2 Ministry of Natural Resources

Review of Applications I2008002 – I2008007:

6.2.1 Alleged Contraventions of the Environmental Protection Act, Ontario Water Resources Act,
Fish and Wildlife Conservation Act, and Federal Fisheries Act
re: Soil and Groundwater Contamination at a Former Industrial Property
(Investigations Undertaken in part by MOE; Investigation Denied by MNR)

This application was reviewed in conjunction with I2008002 – I2008007 (MOE). Please see the Ministry of the Environment portion of this section for the full review

SECTION 7

WILL OUR CROPLAND SOIL LAST FOREVER?

SECTION 7: WILL OUR CROPLAND SOIL LAST FOREVER?

The Vital Importance of Soil

When the public think of resources, they typically think of aquifers, lakes and rivers, our forest resources, our oil, gas and mineral reserves, and our terrestrial and aquatic plant communities. They don't usually think of soil as a resource. In fact, only people like farmers, soil scientists, agronomists, and conservation staff devote much attention to it. Yet soil is the fundamental source of all fertility; without it, life could not exist. We rely on soil to produce our food, degrade our solid wastes, clean our water, and provide dependable habitat for the countless microbes (at least 10,000 species per gram of soil) that provide these vital ecological functions. Soil is the rich, diverse, and living base for all the life on our planet.

Cropland soils are vital to our economy. In 2006, Ontario's approximately 3.7 million hectares of cropland produced \$8.8 billon in farm receipts. The Ontario farm and food processing sector generates over \$30 billion in sales annually - more than 35 per cent of Canada's agri-food sector GDP. Our agricultural exploitation of the soil resource has also become much more efficient over time; for example, the average seed-corn yield has gone from about 3.5 tonnes per hectare 30 years ago to about seven tonnes per hectare at present - a doubling of output. Similar increases have been achieved with other important crops, such as soybeans.

Much of this increase in productivity is a direct result of relatively low-cost energy inputs such as inorganic fertilizers, pesticides, and mechanization, combined with agronomic advances in plant hybridization and genetics. More recently, however, the sustainability of this approach has been called into question. Can we continue to produce crops year after year on the same lands and expect sustained or even greater yields? Should we not be asking whether this high level of productivity and the methods used to achieve it could be affecting the quality and quantity of available fertile soil? The ECO believes that it is time to take a close look at the status of our Ontario soils and to consider whether we are managing them in a sustainable way.

What is Soil?

The Constituents of Soil:

Soil consists of a mixture of organic and mineral particulate matter of various sizes and proportions. Soil is typically layered and scientists have developed a standard classification system to describe these "horizons". The A Horizon is what most of us know as topsoil. This layer usually contains more organic material than lower layers and sustains most of the soil's biological life. The B horizon, or subsoil, is usually of greater depth than the A horizon but has little if any organic matter (although plant roots do penetrate this layer). The C Horizon, or substrate soil, is mostly mineral, including "parent" material derived from bedrock.

In terms of cropland, the A horizon is of greatest concern. In this topsoil layer, the mineral portion contains sand, silt and clay, and the relative amounts of each of these determine its characteristic texture. Clay is the finest portion and provides for the water holding capability of the soil, while sand and silt provide pore spaces that keep the soil aerated and drained. Soils take many hundreds or thousands of years to form, originating from rock parent materials that have disintegrated and decomposed through abrasion, chemical and biological activity.

The Importance of Soil Organic Matter (SOM):

Overall, the amount of organic matter in soils ranges from one to ten percent of total dry weight. The organic component of soil consists of a variety of components. These range from raw plant residues (less than 10 per cent of the SOM) to a humus portion (40 to 60 per cent of SOM) that is fairly resistant to further biological breakdown. Between these stages is an interim phase of "active" organic material (10 to 40 per cent of SOM) that is being processed by microorganisms, particularly fungi. The organic material in this specific fraction is very important for a number of reasons. For instance, the microbes that live in

and feed on this material produce organic glues and fungal threads that bind soil particles into a friable aggregate form that provides good topsoil structure.

In soils with adequate organic matter, these microbes and other micro fauna create a "food web" and soil structure that provides the following benefits:

- improved water retention and infiltration
- improved cation availability to plants (these include key nutrients)
- a source of slowly released plant nutrients (microbes make the nutrients available at a rate compatible with plant requirements)
- improved nutrient retention through increased resistance to leaching (nitrogen and other nutrients are less mobile in organic form)
- lower bulk density (improving tillage characteristics and moisture holding capacity)
- increased biodiversity in soil, resulting in greater resilience with respect to the above benefits as climate and soil conditions vary

This biological matrix depends on organic matter to provide food for the organisms. If the food web is diminished due to the loss of organic matter, the soil becomes more susceptible to compaction and is much more prone to erosion. The loss of water holding and infiltration capacity makes crops more susceptible to short term drought effects. The loss of nutrients and the reduction in number and diversity of beneficial micro-organisms within the active fraction of the organic matter reduces the soil's overall productivity and necessitates more dependence on potentially costly external inputs of fertilizer to the cropping system.

Maintaining Soil Carbon Balance:

SOM declines when land is first cleared and put into agricultural use, with most of the loss occurring within the first 10 years, diminishing gradually afterwards and slowly stabilizing at some lower level. Information on the amount of SOM in Ontario soils and long term trends is extremely limited. One very instructive study in Ontario carried out by Agriculture and Agri-Food Canada researchers compared soil carbon in surface and subsurface soils of cropland and in adjacent forest or woodlot soils. This study found that for 16 study sites ranging across Ontario, deforestation and cultivation over the decades had released about 34 per cent of the soil carbon in the top 250 mm to 350 mm of soil. Some recent assessments based on modelling procedures indicate that the more conservative cropping and tillage practices implemented in the last 20 years have stemmed the loss of organic matter and are beginning to rebuild it in our soils; however, this has not been verified by direct measurement.

Given the recent interest in carbon budgets, addressing the carbon deficit in agricultural soils may provide multiple benefits. Sequestration of carbon in soils as part of a carbon trading program is currently being implemented in Alberta and may have some potential in Ontario. Sources of carbon for sequestration could originate with manure sources or plant residues from deep rooted crops. Support for this has been provided by several long term studies. University of Guelph researchers found no-till corn production to be able to add one tonne per hectare of organic matter to the soil each year on average. Animal manure application at appropriate rates has also been shown in long term studies to increase soil organic matter up to ½ tonne per hectare.

The Problem of Soil Erosion:

The substantial carbon losses described above greatly increase our croplands' susceptibility to soil erosion, which can be defined as the detachment of soil particles from their aggregate form and their subsequent removal by physical forces. Soil erosion occurs in the following forms: tillage erosion, wind erosion, and water erosion.

Tillage erosion is caused by the movement of soil down-slope as a result of tillage operations. It can be a serious problem on the upper slopes of the complex terrain of parts of south-western Ontario. Unlike water erosion, which can result in soil lost to the land base via drainage channels, tillage erosion is more of a concern at the field scale, removing fertile soil from ridges and depositing it further down the slope.

At one time, wind erosion during temporary dry spells in the late spring and early summer was considered a serious problem in Ontario. Generally, Ontario's humid climate lowers the risk of wind erosion by reducing the rate at which surface soils dry out. However, there is some evidence that the frequency of droughts is increasing as a result of climate change (see the article on Drought in Ontario in the ECO's 2007/2008 Annual Report) and that this form of erosion may re-emerge as a concern.

Water erosion potential is widespread, potentially highly destructive, and therefore the major concern. Different soil types and terrains vary in susceptibility to water erosion. In general terms and assuming equal SOM levels in soils, land is generally susceptible to erosion in proportion to its slope, slope length and lack of cover, and the fineness of the soil. Knowing these factors, land that is at highest risk of erosion can be identified and management practices targeted to those areas to reduce that risk. A model known as the Universal Soil Loss Equation (USLE) is widely used to assess the potential gross erosion rate based on the above factors. In the discussion which follows we will refer to soil loss risk based on this type of assessment. The reader should note that while actual soil losses vary from year to year, depending on rainfall frequency, intensity and other factors, in general the USLE provides good guidance for the determination of the extent and location of problem areas, trends, and modelling of soil management options.

Ontario's Risk of Soil Erosion

How serious a problem is soil erosion in Ontario? To answer this question, we need to know: first, how much topsoil we lose on an annual basis; second, the annual replacement rate for topsoil; and third, in what direction is the trend moving: is our conservation of soil improving or failing? Complete answers to these three questions are not available – a problem in itself – but there are some disturbing partial answers.

With regard to annual topsoil loss, estimates based on actual sampling and measurement are sparse to non-existent. However, Agriculture and Agri-Food Canada (AAFC) has compiled a comprehensive series of reports on "Agri-Environmental Indicators", which use Census of Agriculture data and Soil Landscape of Canada maps to assess the *risk* of various rates of soil erosion for all provinces. These risk estimates are based on data regarding physical factors such as slope, slope length and lack of cover, and fineness of the soil. They do not consider the level of organic matter. Table 1 summarizes the most recent estimates of water erosion risk in Ontario.

Table 1: Cropland Water Erosion Risk in Ontario 2001

Erosion Risk Category	Annual Soil Loss Rate (tonnes/ha)	Percentage of Soils in Risk Class (2001)
Very low	< 6	56
Low	6 – 11	15
Moderate	11 – 22	16
High	22 – 33	7
Very High	> 33	6

From: Agri-Environmental Indicator Report Series, Report No. 2 (AAFC)

According to this analysis, as of 2001, 44 per cent of our land had the potential to erode at rates greater than six tonnes per hectare per year. To put this into perspective, for almost half of our cropland, we are at risk of losing *at least* one tonne of soil for every tonne of grain corn produced. For up to 29 per cent of our arable land, the potential loss rate is at least twice that.

If the above represents our annual risk of soil loss, what would be a reasonable estimate of the replacement rate? Soil regeneration rates have been reported in the range of 0.5 to 1.1 tonnes per hectare per year. This is considerably lower than the 6-tonne-per-annum level set by AAFC as "low risk", meaning that even our low-risk croplands may be losing their topsoil at a rate well above that of natural replacement. We cannot say at what rate this is actually happening, because we do not have the data, but we can say that the risk of this type of unsustainable loss is very high for a very large proportion of our croplands.

From a policy perspective, both the Canadian and Ontario governments have defined "tolerable" (T) soil loss not in terms of soil replacement, but rather in terms of sustained crop productivity. This is because, in practice, soil loss risk could not be kept within soil replacement rate levels for row crops such as corn and soybeans, unless very conservative practices or multi-year crop rotations with forage crops were implemented. The value for T has usually been set by determining soil loss rates below which crop yields have been noticed to decline. For instance, the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) uses a T value of 6.6 tonnes per hectare per year, while AAFC uses a T value of seven tonnes per hectare per year.

Unfortunately, the concept of "tolerable" seems to have replaced the concept of "sustainable" in our soil management policy. Perhaps this is because the loss of quality topsoil can be an insidiously gradual process. It is masked by the use of inorganic fertilizers - at least until dire symptoms such as noticeable erosion damage or marked declines in major crop yields "suddenly" appear. According to OMAFRA, this lack of awareness results because "continuous advances in soil management and crop production technology ... have maintained or increased yields *in spite of soil erosion*" [emphasis added]. By ignoring the continuous loss of the natural soil resource, farmers are becoming locked into an expensive subsidization process that threatens the resiliency and sustainability of our agricultural system.

The risk of soil erosion can be reduced through certain management practices, such as cover cropping and conservative tillage technologies. In terms of cover cropping, perennial covers of hay and pasture give a high degree of protection to the soil, as compared to widely spaced row crops such as corn, which provide very minimal soil protection. Other uses of cover crops include: protecting bare soil between harvest and next planting; covering the bare soil between rows of conventionally grown crops; and renewing the soil's nutrient supply during fallow periods (e.g., green manures).

Conservation tillage practices that substantially reduce water (and tillage) erosion include: *no-till*, where seeds are drilled directly into the soil; *chisel ploughing*, where the main function is to loosen and aerate the soils without turning, while leaving crop residue at the top of the soil; and *disk harrowing*, where the soil's surface layers are disked (cut) but not turned. The traditional mouldboard ploughing and associated secondary tillage, on the other hand, set up conditions that are conducive to water and tillage erosion, and to accelerating the loss of organic matter.

Soil Management Policy in Ontario

The above analysis certainly indicates that soil erosion is a serious concern in Ontario. Is the trend for the better, or for the worse? A short history of soil management policy in Ontario is illustrative in this regard. Serious problems with soil degradation in Ontario began occurring in the early 1960's. Mixed livestock-cropping systems, high proportions of forage and cereal grain production, and multi-year crop rotations had begun to be replaced by intensified crop production, crop specialization, the separation of livestock operations from crop production, and off-farm inputs of fertilizers. We think that it is worthy of note that early conservation-planning services for farmers, offered as extension services from Ontario Agricultural College from 1945 until about 1958, were phased out due to growing interest in commercial fertilizers as a substitute for plant nutrients lost because of soil erosion.

The early environmental movement of the 1960s and 70s created a new awareness and interest in these issues. In turn, this led to major binational studies under the Pollution from Land Use Activities Reference Group (PLUARG). This group's report of 1978 showed the scale of erosion, sediment and nutrient runoff from land uses in the Great Lakes Basin and forced the agricultural community to begin to address these issues. It was not until 1983, however, that programs began to appear to assist farmers to address environmental issues and implement conservation practices.

By the 1980's the situation on soil degradation – not just in Ontario, but in other provinces as well - had become severe enough to engage the attention of the federal government. A five-month inquiry initiated and led by the Hon. Senator Herbert Sparrow led to the publication in 1984 of "Soil at Risk: Canada's Eroding Future", a milestone work in soil conservation in Canada. The report's opening statement, a

quote from the Ontario Chapter of the Soil and Water Conservation Society, clearly states the nature and scope of the concern:

"Soil erosion may well be the most underrated yet most damaging natural resource problem of the 80s"

In 1986, in response to the Sparrow report, the National Soil and Water Conservation Council was formed and the following year they introduced the National Soil Conservation Program (NSCP). This action signified agreement among federal and provincial ministers of agriculture that soil degradation was a significant issue that warranted further action. The program provided funding and agreements with the province of Ontario. From this emerged Ontario's Land Stewardship Program (LSP), which ran from 1987 until 1990 and provided farmers with significant funding dedicated to on-farm conservation projects.

In 1986, the Canada-Ontario Soil and Water Environmental Enhancement Program (SWEEP) also began, addressing the Great Lakes Water Quality Agreement Annex 3 goal of achieving a reduction of phosphorus loading to Lake Erie by 300 metric tonnes per year. This five-year, \$38M program included the highly successful Tillage 2000 program, aimed at promoting conservation tillage and other soil conserving strategies with farmers, as well as other important subprograms. These two major overlapping programs spanning the mid-80s to mid-90s expended over \$100 M and no doubt acted synergistically in bringing about change in agricultural practices. Adding further impetus, the federal government launched its Canada Green Plan in 1990, in response to the Brundtland Commission's challenge for global environmental sustainability planning. The Canada Green Plan, which ran through 1997, included a Soil Quality Evaluation Program (SQEP), and produced a second Land Stewardship Program agreement with Ontario that ran from 1990-1993.

The Soil Quality Evaluation Program was intended to be a long term program to "develop national capability to assess soil quality and associated environmental quality, as well as the effects of land use and management practices on these qualities". However, the program ended prematurely in 1995. Its final report stated: "soil health will continue to decline in areas of intensive cropping and marginal land where conservation farming methods are not used."

A complete discussion of the components of all the above federal-provincial initiatives and their successors would be beyond the scope of this overview. The important thing to consider is the degree to which they contributed to progress toward sustainable soil management in Ontario. The 2005 AAFC Agri-Environmental Indicator Report showed some progress in terms of reduced tillage erosion, wind erosion and water erosion risk. Results comparing water erosion risks between 1981 and 2001 are shown in Table 2.

Table 2: Cropland Water Erosion Risk in Ontario, 1981 to 2001

Erosion Risk Category	Annual Soil Loss Rate (tonnes/ha)	1981	2001
Very low	< 6	44	56
Low	6 – 11	22	15
Moderate	11 – 22	15	16
High	22 – 33	11	7
Very High	> 33	8	6

From Environmental Sustainability of Canadian Agriculture; Agri-Environmental Indicator Report Series Report #2.

The report stated a 12 per cent increase in the percentage of Ontario soils in the "very low risk" class from 1981 to 2001; furthermore, the report states that most of this improvement (11 per cent) occurred between 1991 and 1996 – concurrent with the NSCP, LSP, latter part of SWEEP and the Canada Green Plan. This improvement probably reflects changes in cropland area, shifts in the types of crops grown, and the use of no-till and conservation tillage. The report also indicated a shift of five per cent of Ontario cropland from the "high" and "very high" categories into the "moderate to very low" range. Despite these improvements, however, Ontario still had, as of 2001, one of the lowest proportions (56 per cent) of land

in the very low risk class and the largest share (six per cent) of cropland in the very high risk class, compared with other provinces.

The report also noted that tillage erosion decreased by 25 per cent between 1981 and 2001. However, Ontario still had the highest proportion of cropland in the high tillage erosion risk class (16 per cent) of all provinces.

In 2001, AAFC announced a three-year national Agricultural Environmental Stewardship program which provided funding for Ontario's agriculture and agri-food sector. The program was administered cooperatively in Ontario by the Ontario Farm Environmental Coalition and the Agricultural Adaptation Council. The goal of the program was to support technology transfer and the adoption of innovative best management practices, and promote education and awareness. With this program, Environmental Farm Plans (EFPs) were introduced. Environmental Farm Planning is a voluntary, confidential process used by farmers to identify environmental risks on their farm and to develop strategies to mitigate them.

The Agricultural Policy Framework (APF), a federal initiative intended to support a national approach to agriculture, followed in 2003. Greencover Canada and Farm Stewardship were initiated under this framework and Environmental Farm Planning was extended, all under joint federal-provincial agreement. The programs are delivered to the farm community by the Ontario Soil and Crop Improvement Association and the Conservation Authorities, and OMAFRA plays an active role supporting the programs. While grants for soil conservation aspects flow from the federal side, OMAFRA provided inkind support to this side of the program. It also provided funding starting in 2004 to provide incentives for implementation of best management practices for livestock operations in support of the *Nutrient Management Act*. The program lasted through 2008 and the federal government has announced that it will extend the program with an enhanced version known as "Growing Forward". OMAFRA is expected to be a provincial partner in this program as well, but the degree to which it will focus its efforts on soil health issues is unknown at present.

In 2008, the Commissioner of the Environment and Sustainable Development (CESD) audited the Environment Section of the Agricultural Policy Framework, to examine whether its objectives for environmentally sustainable agriculture were being achieved, and to assess its ability to report on performance under this section. The report identified, and was very critical of: first, a lack of monitoring data necessary to track the effectiveness of the programs; and second, delays in the availability of data under the Agri-Environmental Indicators Reports. The CESD report notes that by the end of March 2008, a 21 per cent reduction target had been set for the estimated average rate of water erosion on cropland; furthermore, a baseline year of 2001 had been established for monitoring and assessment purposes. The next AAFC Agri-Environmental Indicators report, due in 2009, will show progress toward that goal. Certainly, based on statistics compiled by the OSCIA and AAFC, the Environmental Farm Plan component of the APF in Ontario has been moderately successful in terms of establishing a range of durable best management practices. However, as the CESD pointed out, there is little information available to assess the effectiveness of expenditures in terms of actual environmental benefit.

ECO Comment

While some progress has been made since the 1980s, there is still a situation where a predominant portion of our agricultural soils are being managed in a way that is clearly not sustainable. We do not know how much of our soil is being lost each year at unsustainable rates, but the information that we do have suggests that almost half our cropland is at risk of losing topsoil at a rate that is much greater than its replacement rate. Moreover, we have no guarantee of sustainable soil loss rates on *any* of our croplands. Reports within the last ten years indicate that agricultural soil conservation practices have been adopted over a relatively small percentage of the province's croplands. No-till practices have increased substantially in the last 20 years, yet the percentage of overall cropped land under no-till remains less than 20 per cent.

Meanwhile, climate change appears to be changing Ontario's weather patterns, increasing the likelihood of more intensive runoff events. One recent report has warned that more frequently occurring spring-rain

events, coming at a time when soil is left unprotected by crops, could potentially increase erosion rates by one or more orders of magnitude. Economic shifts are also coming into play. Agricultural operations continue to increase in size and specialization and there is rising interest in production of grain for ethanol, soybeans for biofuel, and in crops and crop by-products as alternative fuel for electrical generation. These trends may increase the amount of high-risk cropland brought into use at the same time as they create a demand for agricultural "wastes" that could substantially reduce the amount of organic matter returned to the soil.

It is difficult to know the dimensions of the overall soil problem. The ECO does not have enough information about actual soil erosion rates to be able to do a proper assessment, nor is there sufficient information upon which to evaluate the effectiveness of the most recent cost-sharing programs that have been available under the Agricultural Policy Framework.

Similarly, the monitoring of sediment loss from watersheds is insufficient to enable us to identify trends in soil loss related to changing practices or climate change and thus to prioritize watershed areas of concern. The last substantive effort, carried out under PLUARG in 1978, estimated the average annual transport of sediment via tributaries to the Canadian portion of the Great Lakes at 1,084,000 tonnes. The ECO does not have enough recent data to determine whether this situation has changed and, if so, by how much.

Finally, given its importance to soil health, it seems inconceivable that we know virtually nothing about our soil organic matter and how it is changing. This is information which could be of great value not only in saving and enriching Ontario's soil, but in developing strategies for sequestering carbon to offset greenhouse gas emissions. We must find ways of overcoming the economic barriers to re-incorporating organic "wastes" back into agricultural soil.

The ECO encourages OMAFRA to set an aggressive soil conservation agenda for its part in the new federal-provincial programs, and to undertake comprehensive soil mapping review, soil erosion assessment and monitoring to support the evaluation of program effectiveness. The ECO also believes that successful programs, past and present, deserve to be re-assessed, and to have their best elements considered for re-institution. Historic cutbacks in staff who implemented technology transfer and extension programs also need to be reviewed. While farm organizations such as the Ontario Federation of Agriculture (OFA) and OSCIA are doing a good job of delivering programs, OMAFRA staff is needed to represent provincial interests in their interaction with these groups and directly with farmers. Experience has shown that the areas of the province that have the highest adoption rates of conservation practices are those that have benefited from the work of highly qualified field personnel and aggressive promotion of scientifically and economically based initiatives.

Finally, the ECO suggests that OMAFRA consider replacing the concept of "tolerable soil loss" (which does not represent a sustainable level) with "net soil loss" (i.e., soil lost to erosion less natural and engineered replacement) and subsequently develop a long-term strategy to bring Ontario's net soil loss down to zero. This could be done in conjunction with initiatives to sequester carbon as part of a joint soil-conservation /climate-change mitigation strategy.

Ecologist C.S. Holling defined resilience as "the ability of a system to maintain its structure and patterns of behaviour in the face of disturbance." In the case of our croplands, resilience implies not only an ability to maintain its productivity (in commercial terms, produce a crop) in the face of climatic stresses such as drought, heavy rainfall and other extreme events, but also an ability to maintain and renew itself on a sustainable basis. At a time when climate change and economic shifts are throwing new variables at the agricultural community, we need to be assured that Ontario's soils are in good standing.

"Peak Soil" and Food Security

Globally, the amount of cropland has steadily increased since humanity first began to cultivate the soil to produce food. This has always been a *net* increase, however, not an *absolute* one: agricultural land is lost each year to soil degradation, wind and water erosion and conversion of cropland to other uses, such as industry and housing. Until recently these losses have always been more than offset by gains from land being newly put into agricultural use. However, at some point in the mid-1980s, for the first time, the rate of loss of agricultural land began to exceed the amount of land newly cultivated.

In conjunction with this "peaking" of available food producing land, other factors have come into play, resulting in signs of escalating worldwide problems with food supply. Climate change effects, recent shifts in the use of cropland to production of bio-fuel sources, high energy costs, the growing population, and the limiting of world food-producing land all came together in 2008, resulting in soaring food prices. Global "food security" moved to the front of the political agenda, and international conferences were convened to attempt to develop strategies. The global economic downturn that began in late 2008 has pushed the food crisis into the background of media coverage; however, it is in itself a prominent facet of the world economic crisis and will continue to loom large even after economic recovery occurs in the business cycle.

Ontario is not isolated from world food supply issues. This province lost some 243,000 hectares of farmland in the ten years from 1996 to 2006. We imported \$16.6B worth of food products in 2008, compared with our food exports of \$9.3B. All the aforementioned factors of climate change and economics are at play in Ontario. It is therefore incumbent upon the provincial government to take all possible measures to ensure that our soil use is sustainable and that our soil management practices underpin an agricultural system that is resilient in the face of these changes.

SECTION 8

EBR LEAVE TO APPEAL APPLICATIONS

SECTION 8: EBR LEAVE TO APPEAL APPLICATIONS

April 1, 2008 to March 31, 2009 Status as of July 15, 2009

Parties and Date of Leave Application

Registry #: IA06E0324 Applicant: Ken Robins

Proponent: Jancal Power Limited

Ministry: Ministry of the Environment (MOE)

Instrument: Permit to Take Water (PTTW), s. 34, Ontario Water Resources Act (OWRA)

Date Application received by ECO: October 30, 2006

Description of Grounds for Leave Application:

The applicant is appealing the MOE Director's decision to grant PTTW No. 8350-6PNJLX to Jancal Power Limited for its hydroelectric dam on the Rocky Saugeen River.

The applicant sought leave to appeal under the *Environmental Bill of Rights (EBR)* on a number of grounds. These were outlined in the summary of the Leave to Appeal Applications provided in the ECO's 2007/2008 Annual Report Supplement.

Date of Leave Decision: March 1, 2007

Decision on the Leave Application:

The Environmental Review Tribunal ("the Tribunal or the ERT") granted the applicants leave to appeal the Director's decision on all of the grounds asserted by the applicants in their applications.

Status/Final Outcome

Applications for Leave to Appeal Granted. Further to a teleconference held on June 30, 2009, as requested by the Parties, a mediation session was scheduled for August 31, 2009.

Parties and Date of Leave Application

Registry #: IA04E0464

Applicants: Hugh and Claire Jenney

Additional Applicants: Diane and Chris Dawber; Sandra Willard; J. Sulzenko; Mark Stratford; Jamie Stratford; Loyalist Environmental Coalition; Lake Ontario Waterkeeper; Gordon Downie; Gordon Sinclair;

Robert Baker; Paul Langlois; John Fay; Clean Air Bath; and Janelle Tulloch.

Proponent: Lafarge Canada Inc.

Ministry: Ministry of the Environment (MOE)

Instrument: Certificate of Approval (C of A), s. 9, Environmental Protection Act (EPA)

Date Application received by ECO: January 4, 2007

Description of Grounds for Leave Application:

The applicants sought leave to appeal the decision of the Director to issue C of A (Air) No. 3479-6RKVHX to Lafarge Canada Inc., which includes approval to use solid non-hazardous waste materials (such as tires, animal meal, plastics, shredded tires, solid shredded materials, and pelletized municipal waste) as an alternative fuel in the manufacturing of cement at Lafarge's Bath plant.

Leave also was sought in relation to a related C of A for waste disposal activities at the site (see below for further details).

The applicants sought leave to appeal on a number of grounds. These were outlined in the summary of the Leave to Appeal Applications provided in the Supplement to our 2007/2008 Annual Report.

One of the key grounds was that, in issuing the approval, the Director failed to properly take into account the ecosystem approach, promote resource conservation, and apply the precautionary principle, as required by MOE's 1994 Statement of Environmental Values (1994 SEV).

Date of Leave Decision: April 4, 2007

Decision on the Leave Application:

The Tribunal granted the following applicants leave to appeal the decisions to issue amended Certificate of Approval (Air) No. 3479-6RKVHX pursuant to section 41 of the *EBR*: Susan Quinton on behalf of Clean Air Bath; Martin Hauschild and William Kelley Hineman on behalf of Loyalist Environmental Coalition; Lake Ontario Waterkeeper and Gordon Downie; and Gordon Sinclair, Robert Baker, Gordon Downie, Paul Langlois and John Fay.

The applicants were permitted to appeal this decision and the related waste disposal site approval decision in their entirety; the scope of the Appeal was not limited to the grounds on which the Applications have been granted or to the issues raised by the applicants in their applications for Leave to Appeal, unless the Tribunal orders otherwise.

The Tribunal denied leave to appeal to the remaining nine applicants on the grounds that they did not establish that their concerns "have a real foundation sufficient to give them the right to pursue them through the appeal process," and thus they did not meet the section 41 leave to appeal test.

According to the ERT's case management protocol, this case was renamed *Dawber* v. *MOE* after the leave to appeal decision was released, and then subsequently renamed *Baker* v. *MOE* after the Divisional Court decision (described below) was released in June 2008.

Date of Final Decision: December 22, 2008

Final Decision pertaining to Third Party Appeal:

The appeals of both Cs of A were to be addressed in one proceeding before the ERT. However, the proceeding was adjourned pending the outcome of an application made by Lafarge to Divisional Court for judicial review of the Tribunal's Leave to Appeal decision. (See below for additional details.) On June 18, 2008, the Divisional Court released its decision dismissing Lafarge's application for judicial review. Lafarge then sought leave to appeal the Divisional Court's decision, and the Tribunal's appeal hearing was further adjourned. On November 28, 2008, the Court of Appeal dismissed Lafarge's application for leave to appeal.

By email to the Tribunal dated December 18, 2008, counsel for Lafarge indicated that, in light of the Court of Appeal's decision, Lafarge had obtained the MOE Directors' agreement to revoke both Cs of A. Accordingly, Lafarge requested an Order from the Tribunal terminating the appeal proceeding.

On December 18, 2008, the Tribunal held a status update hearing by teleconference. None of the parties opposed the proposed revocations or the dismissal of the appeal proceeding. The Tribunal concluded that the proposed revocations were consistent with the purpose and provisions of the *EPA* and were not contrary to the public interest, as Lafarge had not implemented the operations authorized under the Certificates of Approval. Accordingly, the Tribunal dismissed the proceeding.

Following the revocations, the Loyalist Environmental Coalition, Lake Ontario Waterkeeper, and certain individual appellants (collectively, the "Costs Applicants") sought costs against Lafarge only (the "Costs Application"). In an Order dated February 13, 2009 ERT provided procedural directions for serving and filing submissions respecting applications for an award of costs. The Costs Applicants, Lafarge, and the Director all filed submissions respecting the Costs Application, and provided oral submissions to the Tribunal on April 15, 2009. The Costs Applicants co-operated in providing the Tribunal with joint submissions.

In June 2009 the ERT dismissed all of the applications for cost awards against Lafarge by the Cost Applicants. The Tribunal did not accept the Costs Applicants' submission that Lafarge's rationale for requesting the adjournment of the main Hearing was entirely without merit. The Tribunal observed "that Lafarge's actions must be measured in light of the circumstances that existed at the time the action was taken. No one, at that time, could have known what the outcome of the Judicial Review would be. Lafarge had a legal right to seek Judicial Review. Lafarge's purpose in seeking the adjournment in September 2007 was to allow Lafarge the opportunity to pursue this application."

Additional Information:

In September 2007, Lafarge Canada Inc. applied for a judicial review to Divisional Court, seeking to set aside the April 2007 ERT decision. The litigation sought to judicially review the Tribunal's decision on the grounds that the Tribunal erred in law by misinterpreting and misapplying the test for leave to appeal in Part II of the *EBR* (section 41) and by misinterpreting the role of the 1994 SEV, in particular the finding that the 1994 SEV was part of the "relevant law and ...government policies to guide the decisions of the Director."

In November 2007, Commissioner Miller announced that the ECO would be applying to intervene in the Divisional Court hearing as "a friend of the court" to explain why he believed that the ERT made correct findings on the application of the 1994 SEV to MOE's instrument decisions. Although the ECO's initial application for leave to intervene filed in February 2008 was rejected, the ECO appealed to a full panel of Divisional Court. The ECO was granted intervention status only four days before the Divisional Court hearing commenced in April 2008.

In mid-June 2008, the Divisional Court ruled that the ERT had acted reasonably in granting leave to appeal. The court agreed with the submissions made by the lawyers for the environmental groups and the ECO that MOE's SEV should be considered applicable policy by the Tribunal. It also was reasonable for the ERT to conclude that MOE should have considered the ecosystem approach and the precautionary principle as set out in MOE's 1994 SEV. In addition, the court ruled that the standard of proof for leave to appeal applications under section 41 of the *EBR* is less than a balance of probabilities (the usual standard in civil law trials), and close to the *prima facie* case standard set out in the *Barker v. MOE* decision issued by the Environmental Appeal Board in 1996.

In early July 2008, Lafarge filed an application for leave to appeal the Divisional Court decision with the Ontario Court of Appeal. As noted above, the leave application was dismissed by the Court of Appeal in late November 2008, thus ending this phase of the litigation.

Status/Final Outcome:

Lafarge obtained the MOE Directors' agreement to revoke both Cs of A and was granted an ERT Order, with the support of the appellants, terminating the appeal proceeding.

Parties and Date of Leave Application

Registry #: IA03E1902 Applicant: Clean Air Bath

Additional Applicants: Loyalist Environmental Coalition; Lake Ontario Waterkeeper; Gordon Downie;

Gordon Sinclair; Robert Baker; Paul Langlois; and John Fay.

Proponent: Lafarge Canada Inc.

Ministry: Ministry of the Environment (MOE)

Instrument: Certificate of Approval (C of A), s. 27, *EPA* **Date Application received by ECO:** January 4, 2007

Description of Grounds for Leave Application:

The applicants sought leave to appeal the decision of the Director to issue C of A (waste) No. 8901-R8HYF to Lafarge Canada Inc. to operate a waste disposal site at its Bath cement manufacturing plant to allow the acceptance, processing and incineration of non-hazardous solid waste at a rate of less than 100 tonnes per day.

The applicants sought leave to appeal on a number of grounds. These were outlined in the summary of the Leave to Appeal Applications provided in the Supplement to the ECO's 2007/2008 Annual Report.

Date of Leave Decision: April 4, 2007

Decision on the Leave Application:

The Tribunal granted the following applicants leave to appeal MOE's decision to issue the C of A under section 27 (and section 39) of the *EPA* ("waste C of A"): the Loyalist Environmental Coalition; Lake Ontario Waterkeeper; Gordon Downie; Gordon Sinclair; Robert Baker; Paul Langlois; John Fay; and Clean Air Bath.

The applicants were permitted to appeal this decision and the related section 9 C of A decision (described above) in their entirety; the scope of the appeal was not limited to the grounds on which the applications have been granted or to the issues raised by the applicants in their applications for leave, unless the Tribunal ordered otherwise.

The Tribunal found that these applicants met the first branch of the leave to appeal test on the grounds that it appeared that there was good reason to believe that no reasonable person could have made the decision to issue the C of A under the following circumstances:

 The Director did not assess the potential cumulative ecological consequences of approving the C of A application. The Tribunal noted that the mere fact that the C of A complied with O. Reg. 419/05 was not sufficient to establish that the decision to issue the C of A was reasonable, or to establish that MOE has taken an ecosystem approach in making its decision, as required by MOE's 1994 SEV.

- The Director did not follow the direction in MOE's 1994 SEV to apply a precautionary approach. The Tribunal noted that the Cs of A were approved in the face of uncertainty by MOE about the environmental risk of the permitted activity (as evidenced by MOE's Notice of Proposal for a Regulation to ban the incineration of tires).
- The Director did not turn its mind to the potential effect of the decision on the common law rights of local landowners.
- The Director's decision exposes the residents of Bath to the effects of an activity (i.e., the incineration of tires) that MOE is proposing to ban in the rest of the province, without considering whether such a decision could produce inconsistent environmental effects between communities.

The Tribunal also found that the applicants provided sufficient information to establish that the Director's decision to issue the C of A could result in significant harm to the environment. The Tribunal noted that, despite the fact that MOE has concluded that the facility was able to operate in accordance with O. Reg. 419/05, MOE regulations did not incorporate consideration of cumulative effects, total ecosystem loading, synergistic effects, bioaccumulation or complete standards for high priority contaminants. In addition, the information supporting the C of A application did not include baseline information for air and water quality.

According to the ERT's case management protocol, this case was renamed *Dawber* v. *MOE* after the leave to appeal decision was released and then subsequently renamed *Baker* v. *MOE* after the Divisional Court decision (discussed below) was released in June 2008.

Date of Final Decision: December 22, 2008

Final Decision pertaining to Third Party Appeal:

The appeals of both Cs of A were to be addressed in one proceeding before the Tribunal. However, the proceeding was adjourned pending the outcome of an application made by Lafarge to Divisional Court for judicial review of the Tribunal's leave decision (see below for additional details). On June 18, 2008, the Divisional Court released its decision dismissing Lafarge's application for judicial review. Lafarge then sought leave to appeal the Divisional Court's decision, and the Tribunal's appeal hearing was further adjourned. On November 28, 2008, the Court of Appeal dismissed Lafarge's application for leave to appeal.

By email to the Tribunal dated December 18, 2008, counsel for Lafarge indicated that, in light of the Court of Appeal's decision, Lafarge had obtained the MOE Directors' agreement to revoke both Cs of A. Accordingly, Lafarge requested an Order from the Tribunal terminating the appeal proceeding.

On December 18, 2008, the Tribunal held a status update hearing by teleconference. None of the parties opposed the proposed revocations or the dismissal of the appeal proceeding. The Tribunal concluded that the proposed revocations were consistent with the purpose and provisions of the *EPA* and were not contrary to the public interest, as Lafarge had not implemented the operations authorized under the Certificates of Approval. Accordingly, the Tribunal dismissed the proceeding.

Following the revocations, the Loyalist Environmental Coalition, Lake Ontario Waterkeeper, and certain individual appellants (collectively, the "Costs Applicants") sought costs against Lafarge only (the "Costs

Application"). In an Order dated February 13, 2009 ERT provided procedural directions for serving and filing submissions respecting applications for an award of costs.

As noted above, in June 2009 the ERT dismissed all of the applications for cost awards against Lafarge by the Cost Applicants.

Additional Information:

In September 2007, Lafarge Canada Inc. applied for a judicial review to Divisional Court, seeking to set aside the April 2007 ERT decision. The litigation sought to judicially review the Tribunal's decision on the grounds that the Tribunal erred in law by misinterpreting and misapplying the test for leave to appeal in Part II of the *EBR* (section 41) and by misinterpreting the role of the 1994 SEV, in particular the finding that the 1994 SEV was part of the "relevant law and ...government policies to guide the decisions of the Director."

As noted above, in November 2007, the Commissioner announced that the ECO would be applying to intervene in the Divisional Court hearing as a "friend of the court" to explain why he believed that the ERT made correct findings on the application of the 1994 SEV to MOE's instrument decisions.

In mid-June 2008, the Divisional Court ruled that the ERT had acted reasonably in granting leave to appeal. The court agreed with the submissions made by the lawyers for the environmental groups and the ECO that MOE's SEV should be considered applicable policy by the Tribunal. It also was reasonable for the ERT to conclude that MOE should have considered the ecosystem approach and the precautionary principle as set out in MOE's 1994 SEV. In addition, the court ruled that the standard of proof for leave to appeal applications under section 41 of the *EBR* is less than a balance of probabilities (the usual standard in civil law trials), and close to the *prima facie* case standard set out in the *Barker v. MOE* decision issued by the Environmental Appeal Board in 1996.

In early July 2008, Lafarge filed an application for leave to appeal the Divisional Court decision with the Ontario Court of Appeal. Prior to the leave application, it was expected that the ERT hearing scheduled for September 2008 would resume as planned. As noted above, the leave application was dismissed by the Court of Appeal in late November 2008, thus ending this phase of the litigation.

Status/Final Outcome:

Lafarge obtained the MOE Directors' agreement to revoke both Cs of A and was granted an ERT Order, with the support of the appellants, terminating the appeal proceeding.

Parties and Date of Leave Application

Registry #: 010-1607

Applicants: The Greenspace Alliance of Canada's Capital and the Sierra Club Canada

Proponent: Findlay Creek Properties Ltd. and 1374537 Ontario Ltd.

Ministry: Ministry of the Environment (MOE)

Instrument: PTTW, s. 34, OWRA

Date Application received by ECO: March 11, 2008

Description of Grounds for Leave Application:

The applicant sought leave to appeal the Director's decision to issue PTTW No. 1446-76SP2H to Findlay Creek Properties Ltd. and 1374537 Ontario Ltd. The PTTW was issued for taking water for construction dewatering during installation of water and sewer mains at the Findlay Creek Village subdivision. The applicant sought leave to appeal sections 3.1 (Expiry), 3.2 (Amounts of Taking Permitted) and 4.2 (Monitoring) of the PTTW.

The applicant sought leave to appeal on the following grounds:

- 1. The decision to issue the PTTW is contrary to MOE's Statement of Environmental Values;
- 2. The decision to issue the PTTW disregards sections 2.1.1, 2.1.2, 2.1.3 and 2.1.6 of the Provincial Policy Statement, 2005, contrary to section 3 of the *Planning Act*;
- 3. The decision fails to protect and conserve the biological, ecological and genetic diversity of the Leitrim Wetland, a provincially significant wetland;
- 4. MOE failed to undertake a comprehensive and meaningful assessment of the cumulative effects of successive water takings on the Leitrim Wetland;
- 5. MOE failed to require the proponent to develop a water budget and failed to consider all relevant hydrogeologic and geologic data in the proponents' possession;
- 6. MOE failed to use science that meets the high standards of the scientific community;
- 7. MOE failed to exercise the precautionary approach; and
- 8. MOE failed to foster an open and consultative public participation process by failing to disclose relevant hydrogeologic data to the applicants.

Date of Final Decision: November 27, 2008

Decision on the Leave to Appeal Application:

The Instrument Holder brought a motion to dismiss the Leave to Appeal Application on the basis that it was moot (i.e., the required tangible and concrete dispute had disappeared, and the issues in the proceeding had become academic), as the term of the PTTW in question would expire on September 30, 2008, prior to the disposition of the proceeding.

The ERT reviewed correspondence from the parties, including:

- a letter from Counsel for the Applicants stating that the Applicants consent to an order dismissing the Leave Application as moot, based on advice from the MOE Director that he did not intend to issue any additional short term PTTWs; and
- a letter from the MOE Director confirming that it was not his intention to issue any additional short term permits, and stating that if he is asked to do so he "will make every effort to post notice of the permit on the Registry as a Class I instrument, and therefore subject to [leave to appeal]."

The ERT concluded that the leave to appeal application had become moot, and noted that no party had requested that the Tribunal nevertheless exercise its discretion to hear the Leave Application. Accordingly, on consent of all of the parties, the ERT granted the Instrument Holder's motion to dismiss the Leave Application.

Status/Final Outcome:

Application for leave to appeal dismissed because the issues raised had become moot.

Parties and Date of Leave Application

Registry #: 010-2479
Applicant: John Miller
Proponent: Cameco Corp

Ministry: Ministry of th Environment (MOE)

Instrument: PTTW, s. 34, OWRA

Date Application received by ECO: March 26, 2008

Description of Grounds for Leave Application:

The applicant sought leave to appeal the Director's decision to issue PTTW No. 6025-7BHRJH to Cameco Corporation for its Port Hope uranium conversion facility. The PTTW was issued on February 12, 2008, and the decision was loaded on the Environmental Registry on March 12, 2008.

The applicant sought leave to appeal on a number of grounds. These were outlined in the summary of the Leave to Appeal Applications provided in the Supplement to the ECO's 2007/2008 Annual Report. A more lengthy description of this appeal also appears in the Supplement of the ECO's 2007/2008 Annual Report.

Date of Leave Decision: May 28, 2008

Decision on the Leave to Appeal Application:

The ERT dismissed the application for leave to appeal because it was not filed with the Tribunal within 15 days of the decision notice being posted on the Registry as required by section 40 of the *EBR*.

Application for Reconsideration:

On June 7, 2008, the applicant wrote to the ERT and requested a reconsideration of its decision within the 10-day period allowed. He argued that there was new evidence not available to him at the time of his submissions that he believed "would cause the Tribunal to reach a different decision." He respectfully asked the Tribunal to consider this evidence on its merits and reconsider its decision on his leave to appeal application.

Decision on Application for Reconsideration:

On June 27, 2008, the ERT released its decision on the reconsideration application and reaffirmed its original decision that it had no jurisdiction to adjudicate the matter. The ERT reconsideration decision provided a thorough and careful discussion of its original decision released on May 28, 2008.

Status/Final Outcome:

The ERT dismissed the application for leave to appeal because of a lack of jurisdiction and rejected a reconsideration application filed by the applicant.

Parties and Date of Leave Application

Registry #: 010-0302 Applicant: James Marshall

Additional Applicants: Etienne Saint-Aubin

Proponent: Domtar Inc.

Ministry: Ministry of the Environment (MOE)

Instrument: Certificate of Approval (C of A), s. 27 *EPA* (Waste disposal)

Date Application received by ECO: July 17, 2008

Description of Grounds for Leave Application:

The applicant sought leave to appeal the Director's decision to amend a C of A for a Waste Disposal Site issued to Domtar Inc. The amended C of A permits the use and operation of a 14.7 hectare waste disposal site for the disposal of wastes from the demolition of the Domtar Mill and disposal of non-hazardous contaminated soil from the 700 Cumberland Street property in Cornwall, Ontario. The waste disposal site is located within a total site area of 18 hectares, and the C of A permits Domtar to dispose of 1,000 cubic metres of waste per day at the site.

Grounds for Seeking Leave to Appeal:

Mr. Marshall sought leave to appeal on the following grounds:

- 1. Public consultation on the proposal was inadequate:
- 2. MOE failed to consider the company's compliance history with environmental laws;
- 3. MOE failed to adequately consider relevant geologic and seismic data for the site, which is located in an active seismic zone in proximity to a probable fault line, and to ensure that the composition, design and engineering of the site and/or proposed extensions of the site will protect the surrounding natural and human environment from waste, groundwater, runoff or leachate from the site; and
- 4. MOE failed to adequately consider alternative solutions for remediating the site, such as *in-situ* or *ex-situ* processing of impacted soil, bioremediation or other processes. No comprehensive site characterization or meaningful assessment of the site was undertaken with a view to avoiding the necessity to landfill waste from the site. The toxic nature of the soil and waste material remain and present a threat to the environment.
- Mr. Saint-Aubin sought leave to appeal on the following grounds:
 - 1. No reasonable person, having regard to the relevant law and government policies developed to guide such decisions, could have made the decision given that Cornwall is seeking a new path of transition from its industrial past;
 - 2. The decision could result in significant harm to the environment. Historical dumping at the site may have resulted in substances being present that will eventually need to be removed, and this problem should not be compounded;
 - 3. There was inadequate communication of the proposal to the public and inadequate opportunity for the public to provide input;
 - 4. MOE resources limit its ability to thoroughly monitor the conditions of the C of A; and

5. The rules of natural justice and the policy direction of the Ontario Government give greater authority and responsibility to local communities in charting their future.

Date of Leave Decision: September 10, 2008

Decision on the Leave to Appeal Application:

The ERT denied both applicants' requests for leave to appeal. The Tribunal concluded that, although the applicants articulated grounds that addressed both parts of the two-part test set out in section 41 of the *EBR*, the applicants failed to meet either part of the test (i.e., that no reasonable person could have made the decision, and that the decision could result in significant harm to the environment).

The Tribunal reviewed each of the following arguments made by the applicants in the context of the test set out in section 41 of the *EBR*. The ERT concluded that:

- the public participation process was adequate and respected the principles of natural justice;
- the Director had considered the company's compliance history;
- the Director had considered relevant geologic and seismic data and alternative remediation solutions; and
- the Director's decision would not add to historical blights and result in significant environmental harm.

The Tribunal also emphasized the responsibility of applicants to provide a sufficient basis for the Tribunal to conclude that both parts of the *EBR* test have been met. In this case, the applicants had not provided sufficient evidence (argument, facts, reports or other information) to support any of their allegations. Accordingly, the Tribunal concluded that the applicants had failed to satisfy the test set out in section 41 of the *EBR*.

Other Relevant Information:

North American Acquisition Corporation ("North American"), which plans to redevelop the 700 Cumberland Street property once the waste currently at that location is removed and deposited at the waste disposal site, sought status to participate in the proceeding. In its decision, the Tribunal concluded that North American had a genuine interest in the proceeding and that it could make a relevant contribution on at least one issue that could arise if leave to appeal was granted. The Tribunal therefore granted participant status to North American.

One of the applicants also raised a concern that the decision notice for this instrument was not available in French. To the credit of MOE staff, they agreed to arrange to post a French translation of the notice and this was added to the Registry on August 20, 2008. Since late 1996, MOE policy has been to translate instruments into French in response to public requests. (Nearly all proposal and decision notices for policies, Acts and regulations have been translated into French since 1994).

Status/Final Outcome:

Application for leave to appeal dismissed.

Parties and Date of Leave Application

Registry #: IA06E1293

Applicant: Friends of Rural Communities and the Environment (FORCE)

Proponent: CMB Aggregates (Division of St. Mary's Cement Inc.)

Ministry: Ministry of the Environment (MOE)

Instrument: PTTW, s. 34, OWRA

Date Application received by ECO: July 18, 2008

Background:

CMB Aggregates (the Proponent) applied for a PTTW that allows it to conduct a series of pumping tests to determine the viability of a groundwater re-circulation system (GRS) for use in conjunction with proposed aggregate operations. In September 2006, the Proponent applied for a PTTW to conduct three pumping tests, lasting up to 20 days each, over a 5-week period within the space of nine months. The ministry issued the PTTW on July 8, 2008, with an expiry date of June 30, 2009 (i.e., for a period of 357 days). Notice of application for leave to appeal was filed with the ERT on July 18, 2008.

The ECO was unable to post a notice of the leave to appeal application and the corresponding Tribunal decision on the Environmental Registry. Although the ministry posted an instrument proposal notice for the PTTW on the Registry and sought public comments, the ministry subsequently treated the PTTW as a non-*EBR*-prescribed instrument on the basis that it would not authorize the taking of water over a period of one year or more. Accordingly, the ministry stated in its instrument decision notice that there were no appeal rights pertaining to the decision and deactivated the mechanism allowing the ECO to post an appeal notice on the Registry.

Shortly after receiving the application for leave to appeal, the Tribunal notified the parties that the Tribunal might not have jurisdiction to consider the application, and requested submissions on the issue. The key issue was whether the issuance of the PTTW constituted a decision to implement a proposal for a Class I instrument. To engage the leave to appeal rights under section 38 of the *EBR* – and for the Tribunal to have jurisdiction to hear the leave to appeal application – the PTTW must be a Class I instrument. Pursuant to O. Reg. 681/94 made under the *EBR*, a proposal for a PTTW is a proposal for a Class I instrument if the proposal "would authorize the taking of water over a period of one year or more."

Date of Leave Decision: August 28, 2008

Decision on the Leave Application:

The ERT dismissed the application for leave to appeal for lack of jurisdiction.

In its submissions, the applicant relied on the Tribunal's determination in *Greenspace Alliance of Canada's Capital* v. *Director, Ministry of the Environment* (ERT Case Nos.: 07-164/07-165) that it is the nature of the proposal, and not the duration specified in the application or the permit, that determines whether a proposal is a Class I instrument. The applicant argued that, in this case, the PTTW is a Class I instrument because the ministry had considered it as a Class I instrument when it posted the original instrument proposal notice on the Registry. Further, the applicant argued that the water taking under the PTTW would likely take place for over a year because the system being tested was theoretical and the Proponent would likely encounter difficulties and delays during testing. The applicant also argued that the PTTW, issued for 357 days, carried with it the same risk of significant environmental harm as a PTTW issued for one year or more. The applicant submitted that the Ministry was using the duration of the PTTW, just eight days short of one year, to "circumvent the public's right to seek leave to appeal" when the ministry was aware that there was a high level of public interest in the decision (532 public comments were submitted in response to the instrument proposal notice posted on the Registry).

In contrast, the ministry argued that the PTTW is not a Class I instrument because it authorizes taking for less than one year. The ministry stated that it decided to post notice of the instrument on the Registry, even though it is not a Class I instrument, because the ministry was aware of the high public interest in the matter. The ministry explained that it had intended to post the proposal as an information notice, and that its failure to do so – as well as subsequent reference to the proposal as "no longer" being a Class I instrument – were "administrative oversights," which do not constitute bad faith. The ministry later posted the draft PTTW as an information notice. The ministry also submitted that it had no reason to believe that the testing could not be completed within the 357-day period. The ministry distinguished the circumstances of this case from the *Greenspace* case because, in this case, it was never contemplated that the water taking would occur for a year or more.

Similarly, the proponent submitted that there was no evidence to suggest that the testing would take more than one year. The proponent also argued that stakeholders were told that the PTTW was not a Class I instrument.

The Tribunal, in its written reasons for the decision, confirmed that it is the nature of the proposal, and not the application or the permit, that determines whether a proposal is for a Class I instrument. The Tribunal noted that, while the ministry's administrative oversights were "unfortunate and confusing," they did not make the proposal a Class I instrument. The Tribunal distinguished the facts of this case from those in *Greenspace*, which involved water taking that could have continued for at least a period of two years. The Tribunal concluded that there was no evidence in this case that the water taking would continue for more than one year. Accordingly, the Tribunal concluded that the proposal in question was not for a Class I instrument. The Tribunal therefore did not have the jurisdiction to consider the leave to appeal application.

Status/Final Outcome:

Application for leave to appeal dismissed.

Parties and Date of Leave Application

Registry #: 010-3471

Applicant: The Tomagatick Family (the "applicant")

Proponent: De Beers Canada Inc.

Ministry: Ministry of the Environment (MOE)

Instrument: PTTW, s. 34, OWRA

Date Application received by ECO: October 21, 2008

Description of Grounds for Leave Application:

The applicant sought leave to appeal the decision to amend PTTW No. 8718-7JZGMJ, issued to De Beers Canada Inc., to discharge an increased amount of ground water into the Attawapiskat River. The water source is the Victor Open Pit Well Field, located 90 kilometres west of Attawapiskat. The five-year permit sets out a maximum taking of 150,000,000 litres per day for 365 days per year.

The applicant sought leave to appeal on the following grounds:

- 1. The original estimates for the water taking were dishonest, and permits are completed in a piecemeal manner in order to reduce the potential impacts;
- 2. The De Beers diamond mine is on the applicant's traditional land and on the family's trap line. The legal holder of the trap line permit and the person most affected by the PTTW, the family's Elder, did not sign the release form or agree to any activities on her land. As such, the compensation process for the De Beers mine is illegal;

- 3. The MOE consultation process was disrespectful to the Elder of the family (holder of the trap line licence) whose land will be detrimentally affected. The Elder was not consulted because she was unable to attend the scheduled session. In addition, the applicant noted that MOE staff left afterwards that same night. The legal holder of the trap line licence must be involved in the decision-making process for the issuance of the PTTW;
- 4. The compensation received based on the original water taking estimate is inadequate in light of the actual impacts on the affected trap line;
- 5. This PTTW, which allows for a higher rate of water taking, will have a greater environmental impact on the affected trap line; and
- 6. The increased damage is not accounted for in the compensation package.

Date of Leave Decision: March 9, 2009

Decision on the Leave to Appeal Application:

The ERT denied the Tomagatick family's leave application, ruling that the applicants did not meet the two-pronged test for leave outlined in section 41 of the *EBR*. Under the first prong, the Tribunal held that the applicants failed to demonstrate that there is good reason to believe that no reasonable person, having regard to the relevant laws and policies could have made the decision to issue the PTTW.

The ERT found that the Director did in fact consider concerns about mercury in the environment pursuant to the applicable Ontario laws and policies. The documents cited by the applicants did not provide any additional guidance on the matter.

The ERT also found that it does not appear that there is good reason to believe that the Director's decision failed to have regard for the ecosystem and the precautionary approach outlined in MOE's 1994 SEV. The ERT stated that the applicants must do more than allege the possibility of a serious consequence or scientific uncertainty. Instead they have the onus of establishing that there is good reason to believe that no reasonable person would have reached the Director's decision. The evidence provided by the applicants regarding the release of mercury, the potential for sinkhole formation, and the failure to protect common law rights of the applicants was quite limited and insufficient to satisfy the first prong of the leave test set out in section 41 of the *EBR*.

Given the ERT's findings on the first prong of the leave test, the Tribunal did not consider the second prong.

Status/Final Outcome:

Application for leave to appeal dismissed.

Parties and Date of Leave Application

Registry #: 010-1538

Applicant: Protect Our Water and Environmental Resources Inc. (POWER), Stephen Lister and

Kathy Lister ("Applicants")

Proponent: St. Lawrence Cement Inc.

Ministry: Ministry of the Environment (MOE)

Instrument: PTTW, s. 34, OWRA

Date Application received by ECO: December 4, 2008

Description of Grounds for Leave Application:

The applicants sought leave to appeal the Director's decision to issue a PTTW to St. Lawrence Cement Inc. for water taking at the Acton Quarry. The permit was issued on November 12, 2008 and expires on July 31, 2018. The applicants are seeking leave to appeal the PTTW in its entirety.

Grounds for Seeking Leave to Appeal:

The Applicants sought leave to appeal on the following grounds:

- 1. The Director's decision is not consistent with, or directly contravenes, the public participation provisions and other principles under the ministry's Statement of Environmental Values. In particular, the Director's decision:
- a) fails to take into account the ecosystem approach;
- b) fails to take a precautionary approach; and
- c) fails to promote resource conservation.
- 2. The Director failed to consider the common law rights of landowners in the area, who have been experiencing water quality and quantity concerns for several years.
- 3. The PTTW does not comply with the sustainability/ecosystem function requirements entrenched in the purpose section of the *Ontario Water Resources Act* and other laws and MOE policies.
- 4. The PTTW has a real potential to cause significant environmental harm, including off-site impacts to the environment, nearby residents, and those that rely on groundwater for their water supply. Current dewatering activities have impacted natural infrastructure and biotic features in the area.
- 5. There is a history of non-compliance with the predecessor PTTW.
- 6. The PTTW reporting requirements are less stringent than those under the predecessor PTTW.
- 7. The 10-year term of the permit is inconsistent with the previous approach to the Acton Quarry.
- 8. The explanatory notes in the PTTW lack clarity and are difficult to follow.
- 9. The PTTW does not uphold the International Convention on Biological Diversity or the Ramsar Convention on Wetlands.

Date of Leave Decision: June 3, 2009

Decision on the Leave to Appeal Application:

The ERT denied the leave to appeal application.

The ERT held that the applicants did not meet the two-part test for leave to appeal outlined in section 41 of the *EBR*. Under the first part of the test, the applicants are required to demonstrate that there is good reason to believe that no reasonable person, having regard to the relevant law and to any government policies developed to guide decisions of that kind, could have made the decision. Under the second part of the test, the applicants are required to demonstrate that the decision in respect of which the appeal is sought could result in significant harm to the environment.

On the first part of the leave test, the ERT considered the following three grounds asserted by the applicants:

- 1) The Director's decision failed to have regard for MOE's 1994 SEV;
- 2) The Director's decision failed to consider common law rights of landowners; and
- 3) The terms and conditions in the PTTW do not appear adequate to prevent significant environmental harm.

The ERT held that the applicants failed on all three grounds.

In particular, the ERT ruled that while the applicants provided 12 attachments to their leave application they did not explain in detail "how the Director has failed to take into account the ecosystem approach, the precautionary principle or resource conservation." While the applicants asserted that the *Ontario Water Resource Act*, O. Reg. 384/04 and MOE's PTTW Manual do not incorporate MOE's 1994 SEV, the ERT ruled the assertions were of a general nature and did not meet the test set out in the *EBR*.

The ERT also found that "the applicants did not provide sufficient evidence to suggest that no reasonable person, having regard to common law rights, could have issued the PTTW."

Finally, the ERT concluded that "the applicants must demonstrate that the inclusion or exclusion of terms and conditions, or the nature or scope of some of those terms and conditions, meet the test [of section 41 of the *EBR*]." The ERT ruled the applicants failed to meet this test because MOE provided an explanation on why each condition was included in the PTTW.

Given its findings on the first part of the leave to appeal test, the Tribunal concluded that it was not necessary to consider the second part of the test.

Status/Final Outcome:

Application for leave to appeal dismissed.

Parties and Date of Leave Application

Registry #: 010-3033

Applicant: Peter Case, Chair, Collingwood East Environmental Action Committee. The Committee

is representing three condominium corporations in the Blue Shores development project.

Proponent: Canadian Mist Distillers Limited

Ministry: Ministry of the Environment (MOE)

Instrument: Basic Comprehensive Certificate of Approval (Air) (BCCA), s. 9 EPA

Date Application received by ECO: January 19, 2009

Description of Grounds for Leave Application:

The applicant is seeking leave to appeal the Director's decision to grant Canadian Mist Distillers Limited a Basic Comprehensive Certificate of Approval (Air) (BCCA), which is a single C of A that replaces the existing Cs of A and includes the addition of new or historically unapproved sources for all emissions from the whisky manufacturing facility. The BCCA covers all emissions sources at the facility including fermenters, blending and storage tanks, a cyclone, a scrubber, baghouse, cooling tower, product transfer, warehousing, and non-process sources of combustion. Potential emissions that may be discharged are largely ethanol, particulate matter, and combustion products.

Grounds for Seeking Leave to Appeal:

The applicant is seeking leave to appeal on the following grounds:

- 1. MOE testing confirmed that industrial odours exceeded the odour limit placed on Collingwood Ethanol (another company operating in the area), and the existence of adverse effects on local residents and businesses caused by Collingwood Ethanol and Canadian Mist. MOE should examine the potential impact to the airshed from Canadian Mist before issuing the BCCA;
- 2. Canadian Mist's BCCA does not include an odour limit;
- 3. The BCCA should be confined to the specifics of the company's application for an amended C of A. By issuing a BCCA, MOE is enabling Canadian Mist to continue contributing to the alleged adverse effects reported by the ministry;
- 4. Without odour control limits placed on Canadian Mist, it will be almost impossible for MOE to issue a Control Order for adverse impacts on the airshed generated by the plant;
- 5. Without odour control limits placed on Canadian Mist, both Collingwood Ethanol and Canadian Mist will blame each other for any excessive odours, and ignore complaints about excessive odours; and
- 6. By focusing only on particulate matter and not odour, the BCCA does not recognize ongoing odour issues in the community.

Date of Leave Decision: Pending

Decision on the Leave Application:

The ERT had not released a decision on the leave application as of July 15, 2009.

Status/Final Outcome:

Pending.

Other Relevant Information:

Over the years, MOE has received numerous complaints about odorous emissions from Collingwood Ethanol GP Ltd, which also manufactures ethanol and is located on the same street as Canadian Mist Distillers Limited. The ECO reviewed MOE's decision to issue a Control Order requiring Collingwood Ethanol GP Ltd. (*EBR* Registry Number 10-4379) to abate its odour emissions in the Annual Report and Supplement to the Annual Report.

SECTION 9

EBR COURT ACTIONS

SECTION 9: EBR COURT ACTIONS

April 1, 2008 to March 31, 2009 Status as of July 15, 2009

Parties to the Action and Type of Action

Plaintiffs: Karl Braeker, Victoria Braeker, Paul Braeker and Percy James **Defendants:** Her Majesty the Queen in Right of Ontario, 999720 Ontario Limited,

and Max Heinz Karge

Registry #: CQ8E0001

Date Statement of Claim Issued: July 27, 1998

Type of Action: Harm to a public resource action, section 84, *EBR* **Court Location:** Superior Court of Justice, Grey County (West Region)

Description of Grounds for Claim

The plaintiffs have relied on a number of grounds as the basis for their legal action. These were outlined in the summary of the *EBR* Court Actions provided in the ECO's 2007/2008 Annual Report Supplement.

Status/Final Outcome

Action pending. Notice was approved by the court and placed on the Registry on December 23, 1999. As of July 15, 2009, this matter is still going through various pre-trial procedures and has not been listed for trial.

Parties to the Action and Type of Action

Plaintiff: Wilfred Robert Pearson (and others)

Defendants: Inco Limited, The Corporation of the City of Port Colborne, The Regional Municipality

of Niagara, The District School Board of Niagara, and The Niagara Catholic

District School Board

Registry #: CQ01E0001

Date Statement of Claim Issued: March 26, 2001

Type of Action: Public nuisance action, section 103, EBR

Court Location: Superior Court of Justice, Welland

Description of Grounds for Claim

The representative plaintiff has relied on a number of grounds as the basis for his class proceeding action. The plaintiff maintains that the defendant has and does emit and discharge hazardous contaminants into the natural environment, including the air, water and soil of Port Colborne. The contaminants include oxidic, sulphuric and soluble inorganic nickel compounds, copper, cobalt, chlorine, arsenic and lead. The plaintiff claims that the defendant is liable for the activities at the refinery and the ongoing release of contaminants into the environment and onto the lands of the class members, based on the following causes of action: negligence; nuisance; public nuisance under section 103 of the *EBR*; trespass; discharging contaminants with adverse effects under section 14 of the *EPA*; and the doctrine of strict liability in *Rylands v. Fletcher*. The plaintiff claims punitive and exemplary damages in the amount of \$150 million, and compensatory damages in the amount of \$600 million.

Status/Final Outcome

A longer description of the history of the certification motion and the appeals related to it was provided in the summary of the *EBR* Court Actions provided in the ECO's 2007/2008 Annual Report Supplement. A summary of key events is provided below.

The initial certification motion was heard in June 2002. In a judgment dated July 15, 2002, the Ontario Superior Court of Justice dismissed the plaintiff's certification motion on the following grounds: the plaintiff failed to disclose a reasonable cause of action against the Region, the City or the Crown; there was no identifiable class; and a class proceeding is not the preferable procedure for resolving the issues found to be common among the class members. In September 2002, the Superior Court of Justice held the plaintiff liable for costs on the certification motion. The plaintiff and class members appealed this decision to the Divisional Court. In February 2004, the Divisional Court upheld the lower court's decision that it was not appropriate to certify this as a class action. In March 2004, MOE and the other parties agreed to an undisclosed settlement with the plaintiff, leaving Inco as the only defendant in the lawsuit. On May 30, 2005, the Ontario Court of Appeal (OCA) heard Pearson's appeal of the certification issue. The ECO intervened in this appeal on the issue of liability for costs.

In November 2005, the OCA overturned the two lower court rulings that refused to certify a class of property owners. In doing so, the OCA has determined that when environmental class litigants properly frame their claims, they can be certified. On June 29, 2006, the SCC rejected Inco's application for leave to appeal, allowing the Pearson case to proceed to trial.

The parties are now preparing for trial, which is scheduled to begin in October 2009. The ECO will report on the progress of this case in a future report.

SECTION 10

EMPLOYER REPRISAL APPLICATIONS

SECTION 10: EMPLOYER REPRISAL APPLICATIONS (Section 105 of the EBR)

April 1, 2008 to March 31, 2009 Status as of July 15, 2009

Parties and Date of Application

Applicant to the Ontario Labour Relations Board (OLRB): Ted Cooper

Respondent: City of Ottawa

Date application filed with the OLRB: July 25, 2007

Summary of Application

The applicant filed an application with the OLRB under section 174 of the *Environmental Protection Act* (*EPA*) and also sought to file an application under section 105 of the *Environmental Bill of Rights* (*EBR*). The OLRB eventually ruled, in response to an application for reconsideration filed by the applicant, that the *EBR* application was incorrectly filed because the applicants failed to use the proper form for a section 105 *EBR* application.

The applicant alleged in his application that he had experienced reprisals from his employer as a result of raising issues under these statutes and other environmental laws including the *Environmental Assessment Act (EAA)*.

Section 105 of the *EBR* states that employees may file complaints about employers who have taken reprisals against them when they seek to have environmental laws enforced. (For additional background on section 105 of the *EBR*, see below under Additional Information.)

Background to the OLRB Application

The application relates to events that took place between 2003 and July 2005. In brief, the applicant was trying to stop the City of Ottawa and other approval agencies such as the local conservation authority from allowing the building of residential housing on land in Kanata West along the Carp River. The applicant wrote letters to various ministries of the Ontario government and also reported some of his concerns to Professional Engineers Ontario because he believes that the land in question is prone to flooding and that storm water flooding and sewage backups are a threat to public health. He also issued a number of public statements calling for a provincial government review of the Mississippi Valley Conservation Authority, which he believed had inappropriately approved the city's Kanata West development proposals.

The applicant also alleged that in September 2004 he was threatened by a representative of a developer, and his complaints to his managers about the incident were not acted on.

The events at the applicant's workplace culminated in the issuance of a July 2005 letter to the applicant from the employer. The employer's letter restricted the scope of the applicant's activities, stating the applicant could no longer work with conservation authorities, in storm water management or floodplain management, even though he had been hired in 2002 by the city to work on those files. The July 2005 letter was followed by an additional detailed employer letter to the applicant dated September 15, 2005. The applicant also was subject to a one-day suspension. The September 2005 letter directed the

applicant not to discuss the Carp River/Kanata West project with his colleagues and required him to make his comments about the project in his capacities as a private citizen on his own time.

The applicant's employment was subject to a collective agreement and he filed a grievance dated October 12, 2005 with respect to the employer's actions. The grievance was referred to arbitration. A board of arbitration held a five-day hearing in November 2006. The city argued during the hearing that it was city council's job to defend the public interest and the duty of public servants to implement council decisions like the one to approve Kanata West.

Before the final argument was to be made at the November 2006 hearing, the union withdrew the reprisal allegations related to the collective agreement. In July 2007, the board of arbitration released its decision and ruled that the employer was entitled to have its work conducted in a regular way. In its decision, the board stated that, "having regard to all of the evidence, we do not conclude that the grievor was the subject of any personal harassment by his managers, nor were the grievor's rights of freedom of expression violated."

The lawyer for the city conceded the applicant's complaints to his managers about the September 2004 incident were not acted on by city managers when they were raised in 2005. However, the board ruled a grievance about harassment by a developer should have been lodged by the applicant at the time of the incident, rather than months after it was alleged to have taken place.

At the request of the applicant, the board of arbitration did expunge part of the September 2005 letter that prevented the applicant from working with conservation authorities, in storm water management or floodplain management. Those restrictions were described by the board of arbitration as "sweeping," amounting to an unjustified disciplinary measure against the applicant.

Following the decision of the board of arbitration on his grievance, the applicant filed his application with the OLRB in July 2007. In his OLRB submissions, the applicant argued that the *EPA* and *EBR* provisions protect employees from discipline who are acting to protect the environment. It was further argued that the board of arbitration had not decided whether the employer's disciplinary actions constituted reprisals contrary to the *EPA* and the *EBR*.

In August 2007, the employer requested that the OLRB application be dismissed on a preliminary basis. The employer argued that the OLRB application was a collateral attack on the findings of the city's board of arbitration and an abuse of process.

Date the OLRB Decision was released: July 11, 2008

Decision of the OLRB

The OLRB agreed with the employer that the OLRB application was a collateral attack on the findings of the board of arbitration and an abuse of process. The OLRB ruled that the applicant's claim of improper conduct on the part of his employer was adjudicated by the board of arbitration.

The OLRB also noted that the applicant could have filed his reprisal application with the OLRB in 2005 but he chose not to do so. Instead he elected to proceed under his collective agreement and filed a grievance with respect to the employer's actions. The OLRB agreed with the employer that to allow the July 2007 OLRB application would be untimely and unfair to the employer.

The OLRB also ruled that the board of arbitration had jurisdiction to address the allegation that the employer's disciplinary actions constituted a reprisal contrary to the *EPA*. However the OLRB did not make an express ruling on whether the board of arbitration had jurisdiction to address the alleged reprisal under section 105 of the *EBR*, and whether the employer's disciplinary actions constituted a reprisal.

Application for Reconsideration by the OLRB

On August 7, 2008 the applicant filed an application for reconsideration with the OLRB with respect to the Board's decision dated July 11, 2008 (the "original decision"). In accordance with the OLRB's procedures, the request was referred to the original OLRB panel for consideration.

As his first issue the applicant argued that the original decision "incompletely identified" the application as having been brought under section 174 of the *EPA* when in fact his application was also brought under section 105 of the *EBR*. An affidavit attached to the original July 2007 application to the OLRB indicated that the applicant was complaining of reprisals on prohibited grounds contrary to both 174 of the *EPA* and section 105 of the *EBR*. However, the OLRB noted that the application was filed on a Form A-57, "Application under Section 174 of the Act (Unlawful Reprisal) (*EPA*)", not on a Form A-59, "Application under Section 105 of the Act (Unlawful Reprisal) (*EBR*)". Therefore the OLRB ruled that its original decision correctly stated that the original July 2007 application was brought only under section 174 of the *EPA*.

The applicant further argued that it "must be noted that the *EBR* is distinct from the *EPA* insofar as it articulates a particular employee protection with a view to achieving the statutory purpose of protecting the environment." Specifically, subsection 2(3)(d) of the *EBR* states: "In order to fulfill the purposes set out in subsections (1) and (2), this Act provides ... enhanced protection for employees who take action in respect of environmental harm [emphasis provided by the applicant]." The OLRB noted that both section 174 and section 105 prohibit an employer from dismissing, disciplining, penalizing, coercing, intimidating, or attempting to coerce or intimidate an employee for the exercise of certain rights. While section 105 of the *EBR* additionally expressly prohibits an employer from harassing or attempting to harass an employee for the exercise of certain right, the applicant failed to explain the distinction between the protection provided under section 174 of the *EPA* and those provided in section 105. Consequently the OLRB ruled that the "enhanced protection" offered by the *EBR* "is not with respect to the nature of protection afforded, but rather the range of circumstances in which it can be claimed."

The applicant also raised four other legal arguments to support his application for reconsideration. After reviewing each argument, the OLRB dismissed the application and upheld the original decision.

Additional information

Although they are worded differently, sections 105 of the *EBR* and 174 of the *EPA* both appear to be intended to provide protection from employer reprisals to employees who comply with or seek the enforcement of environmental protection legislation. Under both Acts an employee may file a complaint in writing to the OLRB alleging that an employer has taken reprisals against the employee on a prohibited ground. The *EBR* does not set out a specific procedure for handling whistleblower complaints. The OLRB has indicated to the ECO that the usual procedures for OLRB complaints would apply.

SECTION 11

STATUS OF ECO AND PUBLIC REQUESTS TO PRESCRIBE NEW OR EXISTING MINISTRIES FOR LAWS, REGULATIONS OR PROCESSES UNDER THE *EBR*

SECTION 11: STATUS OF ECO AND PUBLIC REQUESTS TO PRESCRIBE NEW OR EXISTING MINISTRIES FOR LAWS, REGULATIONS OR PROCESSES UNDER THE EBR

One of the challenges facing the Environmental Commissioner of Ontario (ECO) and the Ontario government is keeping the *EBR* in sync with new laws and government initiatives. The ECO strives to ensure that the *EBR* remains up-to-date and relevant to Ontario residents who want to participate in environmental decision-making. The Commissioner and his staff constantly track legal and policy developments at the prescribed ministries and in the Ontario government as a whole, and encourage ministries to update the *EBR* regulations to include new laws and prescribe new government initiatives that are environmentally significant.

There are four main factors that make it necessary to update the *EBR* regulations to include new ministries, programs and laws. First, the Ontario government constantly enacts and implements new environmental legislation. Indeed, a large number of innovative environmentally significant laws and regulations have been passed in the last 10 years, as regular readers of our Annual Reports will know.

Second, the Ontario government may decide to re-organize one ministry or redistribute portfolios between several ministries. For example, in June 2008, the Ontario government announced that the Ministry of Public Infrastructure Renewal (MPIR) would be merged with the Ministry of Energy to create the Ministry of Energy and Infrastructure (MEI). The new ministry works with many partners inside and outside government to support the construction of new schools, public transit, hospitals and energy generation facilities. In addition, its top priorities include: ensuring that Ontario's electricity needs are met in a sustainable manner; developing renewable energy sources; fostering a conservation-oriented culture; and ensuring the modernization of public infrastructure, as part of an integrated vision that encourages growth and environmental stewardship.

Third, members of the public may file an application for review requesting that a certain ministry that is not currently prescribed, such as Education or Finance, be prescribed under the *EBR*, or that O. Reg. 73/94, the General Regulation under the *EBR*, be amended to require a currently prescribed ministry to accept applications for review or investigation. The ECO has received nine applications of this nature since February 1995. In addition, the ECO sometimes recommends that a ministry, agency or process be prescribed under the *EBR*.

A fourth scenario arises when the Ontario government decides to revamp a program, and in doing so, alters the rights of Ontario residents under the *EBR*. For example, when the *EBR* was proclaimed in 1994 the federal *Fisheries Act* was prescribed for investigations of alleged contraventions of ss. 35(2) and 36(3). As described in the ECO's 2001/2002 Annual Report and subsequent reports, the Ministries of Natural Resources (MNR) and Environment (MOE) gradually withdrew from enforcement of these *Fisheries Act* provisions. (For further discussion, see the review of the *Fisheries Act* Compliance Protocol in the 2007/2008 ECO Annual Report Supplement.) In April 2008, MOE finally posted a proposal notice indicating that the *Fisheries Act* would be removed as an Act subject to investigations under the *EBR*, more than five years after the ECO agreed to cease forwarding applications alleging contraventions of the *Fisheries Act* to MNR and MOE. Other laws and related programs that have been affected by similar changes made in the late 1990s and are no longer subject to the full suite of *EBR* rights include the *Planning Act* and the *Conservation Authorities Act*, administered by the Ministry of Municipal Affairs and Housing (MMAH) and MNR respectively.

When the Ontario government passes and then proclaims a new environmental law, the ECO reviews the law to determine whether it would be logical for the Ontario government to prescribe it for the purposes of the *EBR* and to ensure that Ontario residents are extended rights to participate in environmentally significant decision-making on proposed regulations and instruments issued under the new law. For example, certain new laws have sweeping implications for environmental planning, and there is strong public interest in participation in their implementation. Before the public can begin to participate in

decisions to issue new regulations or instruments, or request investigations and reviews, new stand-alone laws such as the *Lake Simcoe Protection Act, 2008* have to be added to the lists of laws prescribed for the *EBR* as set out in O. Reg. 73/94, the General Regulation under the *EBR*.

In some cases, a new law such as the *Brownfields Statute Law Amendment Act, 2001 (BSLAA)* amends existing environmental laws that are already prescribed. In these cases, the ECO may request that a ministry determine if any new environmentally significant instruments are created under the amended law and associated regulations, and if so, the ministry should consider amending O. Reg. 681/94, the Instrument Classification Regulation made under the *EBR*. Inclusion of such instruments under the *EBR* ensures the public rights to participate in environmentally significant decisions, file leave to appeal applications and request *EBR* investigations and reviews.

If the new law is considered to be environmentally significant, the ECO then contacts the Deputy Minister of the ministry responsible and requests that the Act or certain parts of it be prescribed under the *EBR*. If the ministry agrees, it must then seek appropriate internal and central agency approvals and work with MOE, which is responsible for administering the *EBR* and its regulations, to ensure that appropriate amendments are made and that the proposed changes are posted on the Registry for public comment. Usually this process takes between one and three years. In some cases, the process can take much longer. For example, the *Oak Ridges Moraine Conservation Act, 2001 (ORMCA)* was not prescribed until June 2007, even though the ECO raised this issue with MMAH in late 2001 and the ministry posted proposals for regulations related to prescribing the *ORMCA* under the *EBR* in 2003.

To illustrate the current status of various recent Acts and regulations, the ECO has updated its summary in Table 1. This table is an indication of the scope of the challenges faced, and is not intended to provide a comprehensive review. As indicated in Table 1, there have been serious delays in making certain laws subject to the *EBR*. The ECO is concerned about these lengthy delays because this means that the public is deprived of rights to participate in environmentally significant decisions, file leave to appeal applications and request *EBR* investigations and reviews. Moreover, the ECO is not legally empowered to subject ministry decision-making under these non-prescribed Acts to the same degree of scrutiny as would normally occur for decisions made under prescribed Acts.

In the 2008/2009 reporting period the ECO observed some progress in expanding *EBR* coverage. In June 2008, MNR, MOE and the Ministry of Health and Long-Term Care (MOHLTC) completed work on prescribing the *Kawartha Highlands Signature Site Parks Act, 2003 (KHSSPA)*, the *Endangered Species Act, 2007 (ESA)*, the *Provincial Parks and Conservation Reserves Act, 2006* and some parts of the *Health Protection and Promotion Act (HPPA)*. In addition, the *Fisheries Act* was removed as a prescribed Act because MNR's role was changed. (For background, see the ECO's 2007/2008 Annual Report at pages 106-111). The ECO commends the ministries for completing this work.

More progress is expected in the 2009/2010 reporting period. In early June 2009, MOE posted a proposal (*EBR* Registry Number 010-6516) that included a package of amendments to O. Reg. 73/94. In the package MOE has proposed to prescribe the *Green Energy Act, 2009* and the *Ontario Heritage Act,* however, a number of additional updates and needed changes, as described in the Table 1, apparently will remain unaddressed.

Table 2 contains an update on the status of applications for review made by the public to make certain ministries subject to the *EBR* or to expand the number of *EBR* processes that apply to a prescribed ministry.

In our 2006/2007 Annual Report the ECO reported that the ministries appeared to be more receptive to requests for review submitted by members of the public under the *EBR* to prescribe Acts and ministries. This trend has continued in the past two reporting periods. In June 2008, MOE and the Ministry of Transportation (MTO) prescribed MTO for reviews under the *EBR*, implementing a 2003 request made by two Ontario residents in an *EBR* application for review. Given the key role that MTO plays in formulating policies related to public transportation and sound urban development, this is a very positive development and will allow the public to file applications for review related to the work of MTO.

Despite the lack of progress in 2008/2009 on prescribing certain ministries as outlined in Table 2, there are positive signs that some of the issues may be resolved in 2009/2010. In June 2009, MOE posted a regulation notice proposing to prescribe the Ministry of Energy and Infrastructure (MEI) and the Ministry of Small Business and Consumer Services (MSBCS). The proposed regulation also deals with some housekeeping matters such as revising the names of ministries listed in O. Reg. 73/94.

Table 1 - Status of ECO Requests to Prescribe New Laws, Regulations and Instruments under the *EBR* as of July 28, 2009

Act, Regulation or Instrument (Ministry)	ECO Request to Prescribe	Status as of July 28, 2009 and ECO Comment
Building Code Act, 1992 (BCA) (MMAH)	In October 2006, the ECO's 2005/2006 Annual Report recommended that MMAH and MOE fully prescribe the <i>Building Code Act, 1992</i> under the <i>EBR</i> for regulation-making and instrument proposal notices and applications for reviews. The <i>Green Energy and Green Economy Act, 2009</i> which passed third reading on May 14, 2009, contains amendments to the <i>BCA</i> that make energy efficiency a central tenet of Ontario's Building Code.	In March 2007, MMAH and MOE advised the ECO that MMAH has no plan to implement the ECO recommendation on prescribing the Building Code Act, 1992. This is an unfortunate decision and it means that transparency and accountability for MMAH policy- and law-making on green building materials and energy technologies will be reduced. The ECO urges MMAH to reconsider its approach given the growing public concern about issues such as climate change.
Clean Water Act, 2006 (CWA) (MOE)	The ECO's 2006/2007 Annual Report recommended that MOE prescribe the CWA under the EBR as quickly as possible to ensure that all new regulations under the CWA will be subject to the notice and comment requirements under the EBR, and to provide the public with the rights to apply for reviews, investigations and leave to appeal in relation to the CWA. The ECO also urged MOE to include source protection plans (SPPs) issued under the CWA as prescribed instruments under the EBR so that they will be posted on the Registry for notice and comment and can be subject to appeals.	to date, MOE has not prescribed SPPs as instruments by amending O. Reg. 681/94. This is unfortunate as it means less transparency and accountability for
Endangered Species Act, 2007 (ESA) (MNR)	The ECO's 2006/2007 Annual Report recommended that MNR and MOE fully prescribe the <i>ESA</i> under the <i>EBR</i> for regulation-making and instrument proposal notices and applications for reviews. In May 2008, the ECO urged MNR to move swiftly to prescribe such	The ESA was prescribed for most purposes of the EBR by O. Reg. 215/08 passed in June 2008. The ESA was prescribed under sections 3, 6, 9 and 12 of O. Reg. 73/94, with an exception from sections 3 and 6 of O. Reg. 73/94 for non-discretionary regulations made under section 7 of the ESA. ESA regulations also will be

	instruments under O. Reg. 681/94. The ECO explained that this action was necessary in light of the imminent coming into force of the Act, and to ensure that MNR administers the new legislation in a transparent and accountable manner. In March 2009, MNR posted an information notice stating that it intended to prescribe certain instruments under the ESA and the Provincial Parks and Conservation Reserves Act, 2006 (PPCRA) and make them subject to the EBR.	subject to the application for review provisions under the <i>EBR</i> with the exception of non-discretionary regulations made under section 7 of the <i>ESA</i> . See also ECO's Special Report: The Last Line of Defense: A Review of Ontario's New Protections for Species at Risk The ECO also is carefully monitoring MNR's work on reviewing and prescribing <i>ESA</i> and <i>PPRCA</i> instruments and intends to provide updates on this process in future Annual Reports.
Energy Conservation Leadership Act, 2006 (ECLA) (MEI and MOE)	In September 2007, two applicants requested that the Minister of Energy (now the Minister of Energy and Infrastructure or MEI) prescribe the Energy Conservation Leadership Act, 2006 (ECLA) for applications for review and proposals for new regulations. The applicants argue that this would mean that Ontario residents could file applications for review with the MEI and the minister's responses would be formally monitored and reported on by the ECO. Moreover, the Commissioner could then comment on the importance of adopting regulations under the Act, including one that would prohibit restrictive covenants that ban clotheslines.	In January 2008, MEI posted an information notice stating that it intended to develop a regulation that would prohibit restrictive covenants that ban clotheslines. The ECLA was prescribed for the EBR by O. Reg. 215/08 passed in June 2008. However, the ECLA was repealed by the Green Energy and Green Economy Act, 2009 which passed third reading on May 14th, 2009.
Green Energy Act, 2009 (GEA) (MEI and MOE)	The ECO wrote to MEI in May 2009 requesting that it prescribe the <i>GEA</i> under the <i>EBR</i> for regulation and instrument proposal notices and applications for review and investigation.	In June 2009 MOE posted a proposal on the Registry indicating that it intends to move forward on prescribing the <i>GEA</i> under the <i>EBR</i> .
Food Safety and Quality Act, 2001 (FSQA) (OMAFRA and MOE)	ECO wrote to the Ministry of Agriculture, Food and Rural Affairs (OMAFRA) in late 2001 requesting that it prescribe the FSQA for the full range of rights including regulation proposal notices and applications for review and investigation under the EBR.	In June 2009 OMAFRA and ECO staff met and discussed the various issues related to prescribing the <i>FSQA</i> and instruments issued under the <i>FSQA</i> . A further meeting between the Commissioner and the Deputy of OMAFRA is planned for the Fall of 2009.
	OMAFRA informed the ECO in June 2002 that it did not consider the FSQA to have a significant impact on the environment, as the primary purpose of the Act is to provide for the safety and quality of food.	In July 2009, the Deputy Minister of OMAFRA wrote to the ECO expressing his ministry's commitment to prescribe sections of the <i>FSQA</i> related to waste and dead animal disposal under the <i>EBR</i> .

Health Protection and Promotion Act (HPPA) (MOHLTC and MOE)	In July 2004 OMAFRA posted a new regulatory framework for deadstock, including repeal of the Dead Animal Disposal Act (DADA) and Regulation 263, R.R.O. 1990 made under the DADA. OMAFRA also stated that regulations regarding deadstock disposal would be split between the FSQA and the Nutrient Management Act and that such regulations would be posted. In October 2008, OMAFRA and MOE posted a proposal on the Registry titled Regulations for the Management and Disposal of Deadstock in Ontario. The regulations related to this proposal were passed in March 2009 and are now in effect. In November 2008, the ECO wrote to OMAFRA saying it is essential to prescribe the FSQA because doing so will provide greater certainty and clarity and ensure future environmentally significant amendments to FSQA regulations and instruments issued under the Act also are posted. The ECO's 2004/2005 Annual Report recommended that MOHLTC and MOE prescribe the HPPA for regulation-making and related applications for reviews. The ECO was concerned that environmentally significant proposed HPPA regulations related to small drinking water systems would not otherwise be posted since MOE was proposing to transfer authority over small drinking water systems to MOHLTC, as recommended by the Walkerton Inquiry in 2002.	June 2008. The amendments require MOHLTC to
Kawartha Highlands Signature Site Parks Act, 2003 (KHSSPA) (MNR)	The ECO wrote to MNR in April 2005 requesting that it prescribe the <i>KHSSPA</i> under the <i>EBR</i> for review and investigation applications.	The KHSSPA came into effect on

		immediately begin work on prescribing the <i>KHSSPA</i> under the
		EBR.
		The KHSSPA was prescribed for the EBR by O. Reg. 215/08 passed in June 2008. The ECO is pleased with MNR's accomplishment of this goal.
Lakes and Rivers Improvement Act (LRIA), Water Management Plans (WMPs) issued under section. 23.1 (MNR)	The Reliable Energy and Consumer Protection Act, 2002 (EBR Registry Number AB02E6001) received Royal Assent in June 2002 and created section 23.1 of the LRIA, which replaced section 23 of the	Section 23 of the <i>LRIA</i> remains as a prescribed instrument under the <i>EBR</i> , but it appears to be of little or no force and effect. MNR posted information notices for
	Act.	three (3) WMPs during the reporting period. These notices should have
	In our 2002/2003 Annual Report, the ECO encouraged MNR to	been subject to public notice and comment under the EBR.
	amend O. Reg. 681/94 to include WMPs issued under section 23.1 as prescribed instruments.	In March 2006, MNR advised the ECO that it is not proceeding with the classification of WMPs as instruments under the <i>EBR</i> because its Water Management Planning Guidelines for Waterpower "establishes a
		comprehensive approach to public engagement." MNR also noted that the majority of WMPs are complete or close to completion. The ECO finds this decision very disappointing.
Lake Simcoe Protection Act, 2008 (LSPA) (MOE)	The ECO wrote to MOE in April 2009 requesting that it prescribe the <i>LSPA</i> under the <i>EBR</i> for regulation and instrument proposal notices and	that MOE staff currently are finalizing
	applications for review and investigation. The ECO noted that the protection of water quality and	completing work on the Lake Simcoe Protection Plan. The ECO's request to prescribe the <i>LSPA</i> will be
	shoreline habitat and the provision of water and waste water services have been widely recognized to be	considered as part of these processes, along with other public comments.
	environmentally significant matters.	In June 2009 MOE passed the
	It is important that environmentally significant regulations made under	In June 2009, MOE passed the general regulation made under the LSPA (O. Reg. 219/09). This
	the LSPA be posted because the regulations may, among other	regulation addresses various matters related to implementing the Lake
	things: designate the participating municipalities for the Lake Simcoe	Simcoe Protection Plan including transition and the watershed
	Region Conservation Authority; and require municipalities within the	boundary, and was not posted as a proposal on the Registry. This further
	Lake Simcoe watershed to pass by- laws under the <i>Municipal Act, 2001</i>	highlights the need to prescribe the LSPA under the EBR.
	respecting trees or site alteration, or respecting activities that may adversely affect the ecological	

	health of the Lake Simcoe watershed.	
Nutrient Management Act, 2002 (NMA) (OMAFRA and MOE) Note: In late 2003, MOE assumed jurisdiction for enforcement of several aspects of the NMA.	The ECO wrote to OMAFRA in late 2001 and again in 2002 and 2003 requesting that it prescribe the NMA under the EBR for regulation and instrument proposal notices and applications for review and investigation. Unless Nutrient Management Strategies (NMSs) and Nutrient Management Plans (NMPs) are designated as instruments, the public and municipalities will not be notified on the Registry of local nutrient management activities, and residents will be unable to request an investigation under the EBR into possible non-compliance and request reviews of specific NMSs and NMPs.	In January 2006, the ECO was pleased to learn that the <i>NMA</i> and its regulations were prescribed for notice and comment and for applications for review. However, the <i>NMA</i> and its regulations were not designated for applications for investigation and NMSs and NMPs were not designated as instruments. In March 2008, the ECO asked OMAFRA for an update on its work prescribing the <i>NMA</i> for applications for investigation and designating NMSs and NMPs for large livestock operations as instruments. In response, OMAFRA claimed that the purpose of <i>EBR</i> investigations and prescribing of instruments is to achieve transparency, and that this already is achieved by clearly articulating the requirements for NMPs and NMSs in the <i>NMA</i> Regulation (O.Reg. 267/03). In addition, OMAFRA noted that there is sensitivity in the farm community to posting NMPs and NMSs on the Registry because they contain proprietary information. Public access to this information could cause business problems for these farmers. The ECO finds OMAFRA's approach very disappointing.
Ontario Heritage Act (OHA) (MCL)	The OHA is the legislative framework for heritage conservation in Ontario. In 2005, the OHA was amended to formally recognize the natural environment conservation function of the Ontario Heritage Trust (OHT) (formerly the Ontario	In July 2005 MCL committed to review the matter; however, no timeline was provided. In July 2008 the Deputy Minister of MCL advised her ministry had completed its review and will be
	Heritage Foundation). For further detail on the amendments to the <i>OHA</i> and the OHT, see the ECO 2005/2006 Annual Report at pages 76-79.	working with MOE to prescribe the OHA for the purposes of posting proposals for regulations. In June 2009 MOE posted a proposal
	In June 2005, the ECO wrote to the Ministry of Culture (MCL) requesting that it prescribe the <i>OHA</i> for regulation proposal notices and for applications for review under the <i>EBR</i> . ECO and MCL staff also	on the Registry indicating that it intends to move forward on

	discussed this issue at an August 2007 meeting about prescribing the OHT.	make this regulatory change.
Safe Drinking Water Act, 2002 (SDWA) (MOE)	In January 2003, the ECO wrote to MOE requesting that it prescribe the <i>SDWA</i> for regulation proposal notices and for applications for review under the <i>EBR</i> . ECO staff also discussed this issue at numerous meetings between the	summer of 2003. The ECO agrees with MOE that <i>SDWA</i> should not be prescribed for <i>EBR</i> investigations. The fact that Ontario residents cannot file <i>EBR</i> applications for review related to <i>SDWA</i> instruments is an unfortunate result. The ECO urges MOE to reconsider this limitation, which seems contrary to the spirit of the Walkerton Inquiry report. In early 2009, the ECO requested an update from MOE. In response, MOE advised that a preliminary review of the licence for classification purposes has been completed. MOE expects to complete a formal classification review as required under section 20 of the <i>EBR</i> by Spring 2009, and will then be able to determine whether O. Reg. 681/94 needs to be amended.
	responded by stating it had commenced a review under section 20 of the <i>EBR</i> and hoped to complete its review by the fall of 2008.	
Waste Diversion Act, 2002 (WDA) (MOE)	In July 2002, the ECO wrote to MOE requesting that it prescribe the WDA for regulation proposal notices and for applications for review and investigation under the EBR. In May 2003 MOE staff briefed ECO	notices for proposed <i>WDA</i> regulations but Ontario residents are not permitted to file applications for review related to the <i>WDA</i> .
	staff on its position on prescribing the WDA and indicated that MOE did not believe that the WDA should be prescribed for investigations because the contravention section of the WDA is intended to support	In 2004, Ontario residents filed two

the collection of funds to support waste diversion activities by Waste Diversion Ontario.	MOE should reconsider whether it would be worthwhile prescribing the WDA for EBR reviews. Prescribing the WDA for reviews was not included in the June 2009 proposal to amend O. Reg. 73/94.
	In 2007, MOE announced that the WDA would be reviewed in 2008. A proposal notice related to the review was posted on the Registry in late 2008.

Table 2 - Status of Public and ECO Requests to Prescribe New Ministries, Agencies and *EBR* Processes as of July 28, 2009

Ministry or Process	ECO or Ontario Resident Request to Prescribe	Status as of July 28, 2009 and ECO Comment
Making the Ministry of Aboriginal Affairs Subject to the EBR (MAA and MOE)	The Ministry of Aboriginal Affairs (MAA) was established by the Ontario government in November 2007 with a mandate to protect the rights of Aboriginal peoples, and promote the health and economic well-being of Aboriginal Ontarians. In November 2007, the ECO wrote to MAA requesting that the ministry be prescribed for Statement of	In early 2009, the ECO requested an update from MOE. In response, MOE explained that MOE and MAA have discussed the potential MAA activities that might be subject to the <i>EBR</i> and the Registry. MOE also offered its ongoing assistance as MAA reviews its options. Prescribing MAA was not included in the June 2009 proposal to amend O.
	Environmental Values consideration, Registry notice and comment, regulation proposal notices and for applications for review under the <i>EBR</i> .	Reg. 73/94. The ECO urges MOE and MAA to ensure that MAA is prescribed under the <i>EBR</i> before the end of 2009.
Making the Ministry of Small Business and Consumer Services Subject to the EBR (MSBCS and MOE)	The mandate of MSBCS was expanded to include overseeing the Technical Standards and Safety Authority (TSSA) in July 2008. In September 2008 the ECO wrote to the Deputy Minister of MSBCS requesting that the ministry be prescribed for SEV consideration, Registry notice and comment, and overseeing the rights provided by	In March 2009 MSBCS informed MOE that it was completing final approvals for prescription under the <i>EBR</i> . The proposed amendments were intended to include the ministry name change and inclusion of the Technical Standards and Safety Authority. In June 2009 MOE posted a proposal
	the Technical Standards and Safety Act, 2000 (TSS Act). The ECO went on to note that the recent propane explosion at Sunrise Propane in Toronto and public concern about the explosion and related events shows that it is important that public rights with respect to the TSSA are not lost.	on the Registry indicating that it intends to move forward on prescribing MSBCS in the coming months. However, the proposal did not expressly address inclusion of the TSSA.

Making the Ministry of (EDU and MOE)

In May 2004, two applicants Education Subject to the EBR requested that MOE review O. Reg. 73/94, the General Regulation under the EBR, to determine whether the Ministry of Education (EDU) should be added as a prescribed ministry under the EBR. In July 2004 MOE advised the ECO that it was reviewing the request and would require six months to complete its review. A similar request was made to MOE in late 1999 and it was reviewed in the ECO's 2000/2001 Annual Report.

> In September 2005 the Ministry of the Environment completed its review and recommended prescribing EDU for the purposes of progress. consideration of a Statement of Environmental Values that the ministry would create under the EBR. For the full ECO comment on elements for a SEV. MOE's handling of this review. please see pages 123-7 of the ECO's 2005/2006 Annual Report.

In November 2005 MOE posted a proposal notice for a regulation to amend O. Reg. 73/94.

In June 2007, Ontario's Curriculum Council released its proposal describing how environmental education will be taught in elementary and secondary schools.

In early 2009, the ECO requested an update from MOE. In response, MOE explained that EDU "is committed to supporting the environment, as demonstrated in the recently-released Acting Today, Shaping Tomorrow: A Policy Framework for Environmental Education in Ontario Schools." The new EDU framework complements a range of other environmental initiatives already underway.

EDU also states that it is promoting an integrated approach, encouraging targeted approaches to professional development, emphasizes community involvement and provides models for guiding implementation and reviewing

With the assistance of MOE, EDU staff are currently reviewing potential

The decision relating to the status of EDU under the EBR will be posted on the Environmental Registry.

Making the Ministry of Health Promotion Subject to the EBR (MHP) was established by the (MHP and MOE)

The Ministry of Health Promotion Ontario government in July 2005 with a mandate to promote the health and well being of Ontarians.

In June 2006, the ECO wrote to MHP requesting that the ministry be through with staff level meetings in prescribed for Statement of Environmental Values consideration, Registry notice and comment, regulation proposal notices and for applications for review under the EBR. MHP never officially responded with a letter to the ECO.

The ECO spoke with staff at MHP in Registry. the summer of 2006. As of May 2007 work on these matters was

In early 2009, the ECO requested an update from MOE. In response, MOE explained that MOE and MHP have discussed potential MHP activities that might be subject to the EBR and the Registry. MOE also offered its ongoing assistance and followed 2008 to: provide an overview of the EBR; review recently posted SEVs to determine which elements might apply to MHP; and identify MHP policies. Acts and regulations that might be subject to the EBR.

In the summer of 2008, MHP posted two reports related to Trails on the

Making the Ministry of Energy and Infrastructure Subject to the EBR (MEI and MOE)	ongoing at MHP. MOE advised the ECO in March 2007 that MHP was reviewing options for going forward. In the ECO's 2006/2007 Annual Report, the ECO urged MOE and MHP to ensure that the ministry is prescribed under the <i>EBR</i> before the end of 2007. On June 20, 2008, the Premier announced that the former Ministries of Energy and Public Infrastructure Renewal would be merged into the Ministry of Energy and Infrastructure (MEI). In August 2008 the new ministry began reviewing how the <i>EBR</i> should apply to its work.	In March 2009, MEI informed MOE that it was completing final approvals for prescription under the <i>EBR</i> . MEI also has been working on developing a new Statement of Environmental Values, and intends to post a draft of the new SEV on the Environmental Registry in the near future. In June 2009, MOE posted a proposal on the Registry indicating that it intends to move forward on prescribing MEI in the coming months.
Making the Ontario Heritage Trust Subject to the EBR (MNR, MCL and MOE)	OHT holds in trust a portfolio of more than 130 natural heritage properties, including over 90 properties that are part of the Bruce Trail. Protected land includes the habitats of endangered species, rare Carolinian forests, wetlands, sensitive features of the Oak Ridges Moraine, nature reserves on the Canadian Shield and properties on the Niagara Escarpment. In March 2006, ECO wrote to MCL requesting that the OHT be prescribed for environmentally significant decisions. This would	In August 2007, the ECO and MCL staff met and MCL indicated that it was not planning to implement the ECO recommendation because OHT is not a policy-making agency. All policies and programs related to the work of OHT are developed by MCL and MNR; the OHT merely implements those programs. MCL further noted that MNR would ensure

Values consideration and Registry notice and comment for proposal notices for Acts and policies. Such an approach would ensure that future changes to the Natural Spaces Land Acquisition and Stewardship Program (NSLASP) now administered by the OHT would OHT and feels that the current be posted on the Registry for comment. Changes made to the NSLASP in late 2005 were not posted as a regular proposal notice on the Registry. The ECO also requested that MCL post a regular Registry notice about the NSLASP on behalf of the OHT.

Prescribing the OHT was not included in the June 2009 proposal to amend O. Reg. 73/94.

The ECO is very disappointed by MCL's approach to prescribing the funding, policy-making and reporting relations and functions are confused and lack transparency because they are fragmented between MNR, MCL and the OHT.

The ECO notes that the Minister of Culture retains important decisionmaking powers and functions related to the work of OHT, including decisions on the funding of the OHT.

In July 2008, MCL reconfirmed that it will not be proposing to prescribe the OHT under the EBR. MCL continues to believe that, as ministries are responsible for policy matters within the scope of the EBR and as MCL is prescribed, there is no need to prescribe the OHT under the EBR. MCL's and MOE's view is that agencies, boards and commissions are not included under the EBR and it is unprecedented to prescribe them. MCL will continue to emphasize with OHT the importance of appropriate and timely consultation/informationsharing with stakeholders and the public on OHT activities.

For further detail on the amendments to the OHA and the OHT, see the ECO's 2005/2006 Annual Report at pages 76-79.

SECTION 12

UNDECIDED PROPOSALS

SECTION 12: UNDECIDED PROPOSALS

As required by section 58 of the *EBR*, the ECO is required is produce a list of all proposal notices posted on the Environmental Registry between April 1, 2008 and March 31, 2009 that were not decided by March 31, 2009. A detailed list is available from the ECO by special request.